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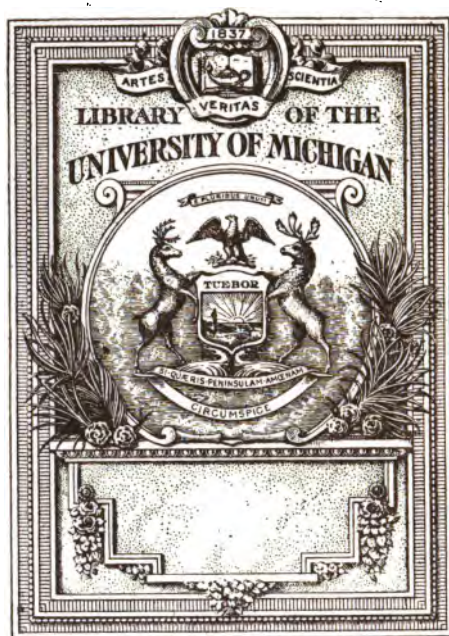
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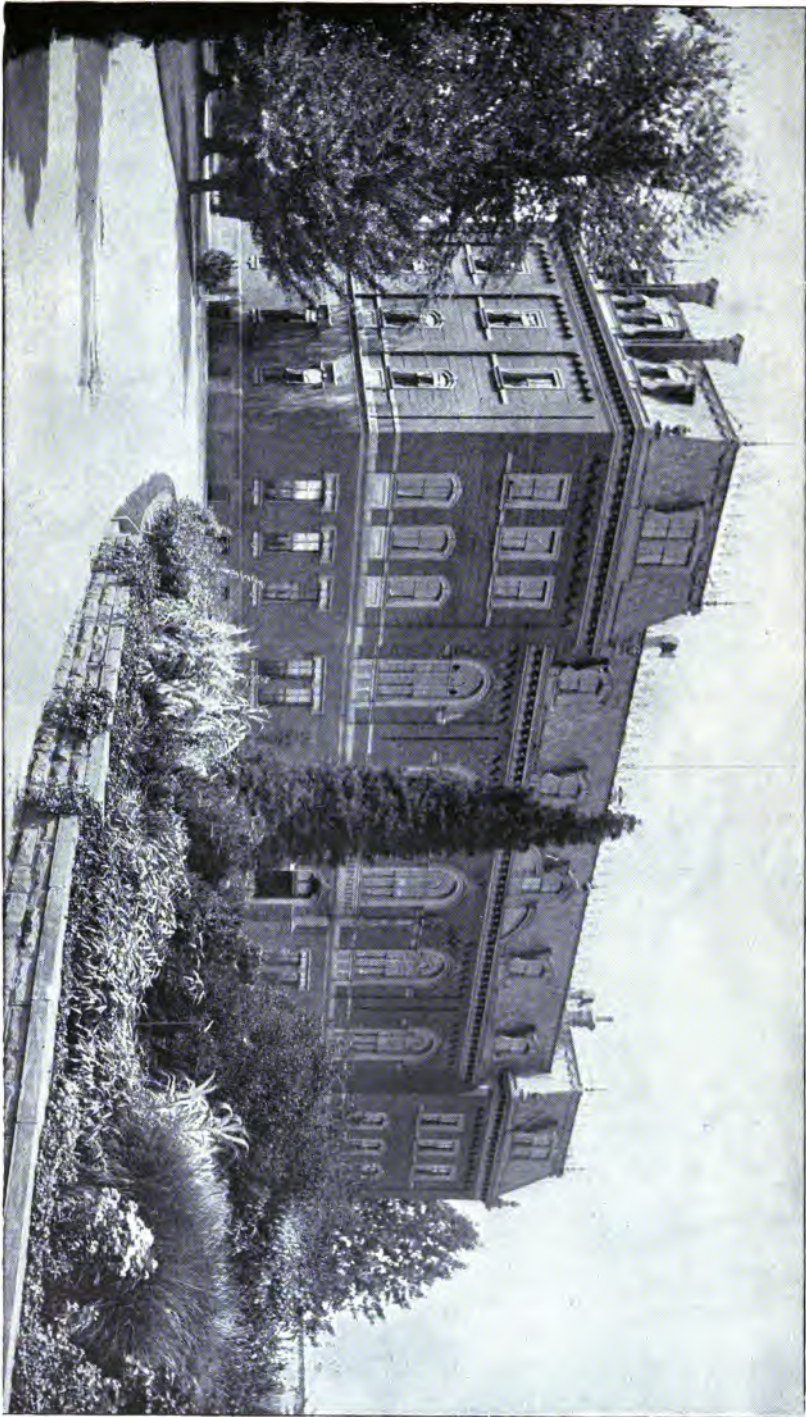
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MAIN BUILDING OF THE UNITED STATES DEPARTMENT OF AGRICULTURE.



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U. S. DEPARTMENT OF AGRICULTURE,

DIVISION OF PUBLICATIONS—BULLETIN 3, Second Revision.

GEO. WM. HILL, Chief of Division.

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## HISTORICAL SKETCH

OF THE

# U. S. DEPARTMENT OF AGRICULTURE;

## ITS OBJECTS AND PRESENT ORGANIZATION.

COMPILED BY

CHARLES H. GREATHOUSE,

*Division of Publications.*



WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1907.

## LETTER OF TRANSMITTAL

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U. S. DEPARTMENT OF AGRICULTURE,  
DIVISION OF PUBLICATIONS,  
*Washington, D. C., January 2, 1907.*

DEAR SIR: A frequent demand for information regarding the origin and development of the Department of Agriculture led to the compilation of the accompanying historical sketch. The compiler, Mr. C. H. Greathouse, of this Division, was instructed to follow as closely as possible, in the selection of subjects mentioned, the annual reports of the several Commissioners and Secretaries, prominence being given to those features of the work of the several administrations which the administrators themselves seem to have regarded as specially worthy of attention.

This historical sketch has been supplemented by a statement of the origin and duties of the several bureaus, divisions, and offices of the Department, in which the several chiefs have concurred, by citations from the several laws under which the Department has attained its present stage of development, and by a statement of appropriations and disbursements for the Department of Agriculture, 1839-1906, inclusive, which was furnished by the Division of Accounts and Disbursements.

The original edition of this bulletin was issued in 1898. It has now been revised and brought up to date, and I recommend its republication without change in the number of the bulletin.

Respectfully,

GEO. WM. HILL,  
*Chief.*

Hon. JAMES WILSON,  
*Secretary.*

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# HISTORICAL SKETCH

OF THE

## UNITED STATES DEPARTMENT OF AGRICULTURE.

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### ORIGIN AND DEVELOPMENT.

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#### EARLY GOVERNMENTAL AID OF AGRICULTURE IN AMERICA.

The Department of Agriculture had its origin in the farsighted wisdom of Washington and the practical activity of Franklin. The former as President suggested the organization of a branch of the National Government to care for the interests of farmers, and the latter, when the agent of Pennsylvania in England, sent home silk-worm eggs and mulberry cuttings to start silk growing. When the representatives of the new United States Government went to foreign lands after the Revolution, they followed Franklin's example. The number and value of their contributions increased till Hon. Henry L. Ellsworth, of Connecticut, in 1839, induced Congress to make a trial of a small appropriation for the distribution of the seeds, cuttings, etc., thus collected, and for the publication of agricultural statistics. The experiment was successful, and the work of the Department has since had a steady growth.

Governmental aid to agriculture, however, antedated the time of Washington and Franklin, though it was desultory and uncertain. James I, in 1622, encouraged the breeding of silkworms in Virginia; in 1642 the general court of Massachusetts offered premiums for sheep raising, and in 1657 the Virginia legislature passed an act to stimulate the raising of hops. In 1732 a parcel of government ground in Georgia was allotted for growing mulberry trees in aid of silk culture, and in the ten years preceding 1743 Parliament granted \$600,000 to promote the cultivation of indigo and other crops in Georgia. In 1748 Parliament put a premium on silk culture in the colonies, and in 1766 the South Carolina assembly voted £1,000 for the establishment of a silk filature in Charleston. In 1775 the South Carolina and Virginia legislatures were taking steps to encourage the sheep industry, but the Revolution came on, and all special efforts in behalf of agriculture were lost sight of.

After American independence had been won and peace was firmly established, strong friendships grew up between public-spirited Englishmen and Americans. When the British board of agriculture was established in 1793, its chief promoter, Sir John Sinclair, had his friend and correspondent, President Washington, made an honorary member. To a suggestion that a similar board ought to form part of the American Government Washington was favorable, but in his reply to Sir John, in a letter of July 20, 1794, showed his clear understanding of the order of growth of public institutions. He said: "It will be some time, I fear, before an agricultural society with Congressional aids will be established in this country; we must walk, as other countries have done, before we can run. Smaller societies must prepare the way for greater, but with the lights before us I hope we shall not be so slow in maturation as other nations have been."

#### WASHINGTON'S VIEWS AS TO A BOARD OF AGRICULTURE.

In order to bring the matter before the public, Washington, in his last message to Congress, on December 7, 1796, made the following statement of his views: "In proportion as nations advance in population the cultivation of the soil becomes more and more an object of public patronage. Institutions grow up supported by the public purse. \* \* \* Among the means which have been employed to this end none have been attended with greater success than the establishment of boards composed of public characters charged with collecting and diffusing information, and enabled by premiums and small pecuniary aid to encourage and assist a spirit of discovery and improvement. "This species of establishment contributes doubly to the increase of improvements by stimulating to enterprise and experiment and by drawing to a common center the results everywhere of individual skill and observation and spreading them thence over the whole nation."

#### RECEPTION OF WASHINGTON'S SUGGESTION.

This suggestion was seconded by Col. Timothy Pickering, Secretary of State, and was favorably received by public men generally. The response of the Senate, drawn by Senator Read, of South Carolina, was as follows: "The necessity of accelerating the establishment of certain useful manufactures by the intervention of legislative aid and protection and the encouragement due to the creation of boards (composed of intelligent individuals) to patronize the primary pursuits of society are subjects which will readily engage our most serious attention."

The House of Representatives referred the subject to a committee, which reported on January 11, 1797, recommending the creation of such a society as indicated. It was to meet annually, and Congressmen, Federal judges, the Secretaries of State, War, and Navy, and

the Attorney-General were to be ex-officio members. The bill was read twice and on the next Monday was taken up for consideration. But a discussion of direct taxes brought a conflict of opinion between city and country members; also Jefferson opposed the recommendation for a military academy, which was associated with this proposal, on the ground that it was not authorized by the specific powers delegated to Congress by the Constitution. The friends of the measure feared to allow it to come to a vote, and it was never further debated.

A similar unsuccessful attempt was made in 1817. In answer to a memorial from the agricultural society of Berkley, Mass., presented on January 29, Mr. Hulbert, chairman of the special committee to which the matter was referred, reported a bill on February 21 for the establishment of a board of agriculture. The bill was committed to the Committee of the Whole, but got no further. Madison's Administration closed on March 4 following, and that time was too near at hand to undertake new legislation of such importance.

#### WORK OF AMERICAN REPRESENTATIVES ABROAD.

But while Congress was waiting for an opportunity for full deliberation on the subject, consuls and naval officers abroad were sending home seeds and cuttings for new crops and aiding in the introduction of new breeds of domestic animals. During Washington's last Administration William Eaton, consul at Tunis, sent to Timothy Pickering, Secretary of State, several Barbary sheep. They came by an armed vessel in the United States service, commanded by Henry Geddes. Mr. Pickering presented a pair of the sheep to the president of the Philadelphia Agricultural Society, and from these the breed spread throughout Pennsylvania and adjoining States.

In 1810, William Jarvis, United States consul at Lisbon, took advantage of the Napoleonic wars to secure thousands of Merino sheep for this country. The Spanish noblemen who owned the sheep had up to that time been slow to part with their pure-bred stock, as they had a practical monopoly of the finest grades of merino wool, but when the French armies were destroying the flocks they were glad to sell them to the Americans. Also, Chinese and French hogs were introduced early in the nineteenth century by such aid of American officials.

During the Administration of President John Quincy Adams directions were given to all United States consuls to forward rare plants and seeds to Washington for distribution, and the National Botanic Garden was established. In 1826 Congress authorized the publication of a manual, prepared by Richard Rush, Secretary of the Treasury, containing the best practical information that could be collected on the growth and manufacture of silk. In 1828 Count Von Haggi's "Treatise on Rearing Silkworms" was printed as a Congressional document. Several valuable reports on the silk industry were also made and published about this time.

**AGRICULTURAL DIVISION OF PATENT OFFICE.**

In 1836 Hon. Henry L. Ellsworth, of Connecticut, Commissioner of Patents, received from Government representatives abroad and from others considerable quantities of seeds and many plants, and distributed them to enterprising farmers throughout the country. This he did without Government authority or aid further than the use of the franks of Congressmen who were his personal friends. He also urged in his report that the Government take up the work of aiding agriculture in this and other ways.

**FIRST APPROPRIATION BY CONGRESS.**

His suggestions and arguments led to the appropriation in 1839 of \$1,000 for the purpose of collecting and distributing seeds, prosecuting agricultural investigations, and procuring agricultural statistics. The



HENRY L. ELLSWORTH,  
Commissioner of Patents.  
1836-1845.

money was to be taken from the Patent Office fund and the work was to be done under the Commissioner, at that time an official of the Department of State. In his report, made in January, 1841, Commissioner Ellsworth stated that 30,000 packages of seeds had been distributed during the year and that agricultural statistics, as gathered in the census, were being prepared for publication. In 1842 these statistics were published, with a survey of crop conditions and prospects. Progress in agricultural science was reviewed and special notice was

made of the manufacture of sugar from Indian corn and the use of lard oil in place of whale oil for lighting. A firm, it was stated, was seeking to make a contract to supply the light-houses on the Great Lakes with maize oil.

**GROWTH OF THE WORK IN THE PATENT OFFICE.**

The distribution of seeds and the collection and publication of agricultural information continued under succeeding Commissioners of Patents. These were Edmund Burke, of New Hampshire; Thomas Ewbank, of New York; Silas H. Hodges, of Virginia; Charles Mason, of Iowa; Joseph Holt, of Kentucky; William D. Bishop, of Connecticut; Philip F. Thomas, of Maryland; S. T. Shugert; and David P. Holloway, of Indiana. In 1849 the Department of the Interior was established, and the Patent Office, with its agricultural work, became



a part of it. The collection of seeds and the publication of agricultural statistics and scientific articles were directly under the care of the Commissioner until that time. No clerk was especially assigned to the duties. In that year the name of F. G. Skinner, who had been publisher of the *American Farmer* at Baltimore, appears in the Official Register as collector of agricultural statistics, at \$1,500 a year. In 1851 it had been found advisable to secure a man of high scientific attainments, and Dr. Daniel Lee, of Georgia, was employed at \$2,000. In 1853 the salary was reduced to \$1,500 again, and D. J. Browne, of New Hampshire, was employed. In 1855 Mr. Browne's salary had been made \$2,000, and C. L. Alexander, at \$3 a day, was assigned to the same work. In 1857 the roll stood: D. J. Browne, \$2,000; T. Glover, New York, \$2,000; H. C. Williams, Virginia, \$2,000; C. L. Alexander, District of Columbia, \$1,200; W. H. Dietz, Pennsylvania, \$1,000; Thomas Donoho, District of Columbia, and Jos. Kilian and C. Simmons, Maryland, each \$3 a day.

Mr. Browne was succeeded, on change of Administration in 1861, by Isaac Newton, of Pennsylvania. David P. Holloway, of Indiana, became Commissioner of Patents at that time, and in his first annual report made an earnest argument for the establishment of a separate department of the Government to deal with the interests of agriculture and productive arts.

#### ORGANIZATION AND WORK OF INDEPENDENT DEPARTMENT.

The subject of an independent department was immediately taken up in Congress and the necessary legislation enacted practically without opposition. The law<sup>a</sup> was approved May 15, 1862. The United States Agricultural Society, organized in 1852 and meeting in Washington annually from that time till 1860, was at all times active in urging the establishment of the department. It was largely instrumental in creating the public opinion which made this practical realization of the hopes of Washington so easily possible. It is noteworthy that in this same year, June 19, 1862, was passed the first act, known as the Morrill law, for the establishment of agricultural colleges.

#### COMMISSIONER NEWTON'S TERM.

The first Commissioner of Agriculture was Hon. Isaac Newton, already mentioned as chief of the section of agriculture in the Patent Office. He took charge in his new capacity on July 1, 1862, when the law establishing a department went into effect. He was a native of New Jersey, but early in life settled in Pennsylvania, where he devoted himself to scientific farming. Under his new appointment he was given full control of the property of the division in the Patent Office and conducted his work independently of the Department of

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<sup>a</sup> The text of this and other laws will be found elsewhere. See p. 57.

the Interior. The propagating garden at Sixth street and Missouri avenue NW., in Washington, first mentioned in the annual report of 1858, was placed under his care and a tract of 40 acres in the same city, lying between Twelfth and Fourteenth streets SW., and B street SW. and the canal (B street NW.), the same now forming the Department grounds, was assigned to him for an experimental farm.

The organization of the new Department proceeded rather slowly at first. There was delay in the transfer of the property of the agricultural division from the Patent Office. Commissioner Newton said in his first report, dated January 1, 1863, that he was not yet formally in possession, though he had called attention to the matter in the previous July. Also, on January 1, 1864, he said he had been unable to use the ground at Twelfth and B streets SW. as a farm, because it was needed by the War Department as a cattle yard for army supplies.

**Appointment of early officials.**—In 1862 Commissioner Newton appointed William Saunders to be superintendent of the propagating

garden, and Mr. Saunders aided materially with advice in organizing the departmental work. It was proposed to employ a chemist, and Mr. Saunders was asked what there was in his branch for the attention of such an official. He said that in the experiments with new varieties of grapes there were analyses which could be made with profit. On August 21, 1862, C. M. Wetherill was appointed Department chemist. He made certain analyses of grapes, and also of sorghum sirup, which were given to the public in the second bulletin



ISAAC NEWTON,  
Commissioner of Agriculture.  
1862-1867.

published by the Department. The first bulletin was a pamphlet by Mr. Saunders on the objects and aims of the Experimental Garden, with a catalogue.

This work and the distribution of plants from the propagating garden, the collection and distribution of seeds, and the publication of agricultural statistics and other information constituted the chief activities of the Department for the first six months.

In 1863 Commissioner Newton appointed Lewis Bollman to be statistician and Townsend Glover to be entomologist. He imported several hundred bushels of choice seed wheat, corn, rye, and other cereals, and several thousand dollars worth of other seeds. At the same

time with these he distributed 1,500 bushels of cotton seed and a large amount of tobacco seed. An especial effort was made to stimulate the cultivation of cotton in the Northern States. In all, Commissioner Newton distributed in 1863 1,200,000 packages of seed and 25,750 bulbs, cuttings, and vines. The publication of monthly reports of the condition and prospects of crops was begun. A Maine farmer wrote soon after this was well under way: "Your monthly reports give me just the information I have wanted for years. Knowing the supply and demand, I am able to sell at my own price."

**Weather service and beet sugar inquiry suggested.**—The study of the climate and storms of this country had long been fostered by the various Departments of the Government and by the Smithsonian Institution, as well as by several individual States, before the act of 1862 establishing the Department of Agriculture. Commissioner Newton in his first and second annual reports dwelt on the vital importance of the weather and climate, and in his third report (1864, p. 10) said:

I would renew my suggestion of last year that if, under the direction of the Government, the state of the weather at different points of the country could be daily communicated by telegraph, so as to be immediately spread over the whole country, very important and beneficial results might follow.

The publication of meteorological data gathered by Smithsonian observers was continued in the monthly reports of the Department from 1863 to January, 1872; but meantime the efforts made by many to induce the Government to establish a practical service for the prediction of storms and floods culminated in the organization of a meteorological division in the office of the Chief Signal Officer of the Army. Eventually this became the Weather Bureau of to-day.

In his third annual report Commissioner Newton also called attention to the beet-sugar industry as it had been developed in France and suggested its adaptability to this country.

**Death of Commissioner Newton.**—During the summer of 1865 he got possession of the land at Twelfth and B streets SW., and started the experimental farm. His son, Isaac Newton, jr., was placed in charge of this work. Tests were made that summer of new and promising varieties of corn, wheat, rye, oats, barley, rice, sorghum, peas, beans, grasses, clover, cabbage, lettuce, onions, tomatoes, potatoes, and melons. Seventy-seven varieties of potatoes were tried. A large quantity of seed was saved from the farm and distributed during the winter and spring.

In July, 1866, Commissioner Newton suffered a sunstroke while in the field on the experimental farm. A large number of varieties of wheat—Tappahannock, Mediterranean, and others now in general use—were being tried. The grain had been cut and was lying

on the ground when a thunder shower suddenly appeared. Commissioner Newton was in his room at the Patent Office. He hastened over to the farm, a mile away, to instruct the workmen how to save the wheat free from any injury. The sun was hot and he was wearing a high silk hat. In moving hurriedly about the grounds he became overheated. His son took him to the little office on the farm and summoned medical assistance. Restoratives were applied, and he partially recovered, but was never well again. He died from the effects of the injury on June 19, 1867.

During Commissioner Newton's time the foundations were laid for the Department library and museum. The first appropriation for the library was \$4,000, in 1864, for the library and laboratory jointly. The Glover collection was bought for the museum in 1867 for \$10,000.

After Mr. Newton's death Mr. J. R. Dodge, who had succeeded Professor Bollman as statistician, became very prominent in Depart-

ment work and so remained for twenty-five years. He edited the Annual Reports and the Monthly Reports and wrote much of the most valuable matter that appeared in them.



HORACE CAPRON,  
Commissioner of Agriculture.  
1867-1871.

#### COMMISSIONER CAPRON'S TERM.

John W. Stokes, chief clerk of the Department, was acting Commissioner after Mr. Newton's death till December 4, 1867, when Gen. Horace Capron, of Illinois, who was appointed on November 29, took charge. He was a native of New York, but in early life removed to Maryland, where he

became a farmer on an extensive scale, applying scientific principles to his operations. In 1847 his receipts amounted to more than \$36,000. In 1854 he removed to Illinois. There he continued farming, especially as a breeder of Devon cattle, till the civil war broke out, when he enlisted in the army, where he rose to be a brigadier-general. After the war he returned to his farm, and at the death of Mr. Newton was selected by President Johnson to succeed him.

Commissioner Capron in his first report paid much attention to steam plowing, beet-sugar making, and the problem of silk culture. He established a system of exchanges of seeds and plants with many

of the Governments of Europe, Asia, and South America. He had the chemical laboratory fitted up and made a large collection of native grasses and forage and fiber plants from Colorado, Texas, New Mexico, and Arizona. In 1868 the Commissioner was asked by Hon. Seth Green, then fish commissioner in New York, by United States Treasurer Spinner, and others to bring the possibilities of fish culture to the attention of Congress. A number of articles published at this time and in the years immediately succeeding made way for the United States Fish Commission.

The main building of the Department was completed and occupied during Commissioner Capron's term. There was favorable comment upon the fact that the cost was kept within the amount appropriated. This was the first instance of the kind in case of so important a work.

An investigation of Texas cattle fever was made and Mr. Capron recommended the establishment of a division of veterinary surgery. The propagation of cinchona plants was begun with a view to introduce the culture in the warmer sections of the country.

**Experimental farm given up—Division of Botany.**—From the outset it had been recognized that the experimental farm at Twelfth and B streets was too small because of the mixing of varieties of seeds when cultivated close together. Mr. Stokes, in his report accompanying General Capron's, recommended that the farm be converted into an American arboretum. This suggestion was adopted the more readily because the new Department building was being erected on the grounds.

The Division of Botany had its origin in 1868 in the suggestion of Prof. Joseph Henry, of the Smithsonian, who stated that considerable quantities of botanical specimens were lying at the Smithsonian unmounted and that they could be made available to the Department of Agriculture if there were a botanist. The collection came from the Hayden and other explorations in the West and from the Japan Expedition. It was agreed upon further conference of those interested that a herbarium should be established in charge of the Department of Agriculture. C. C. Parry was appointed Botanist to arrange and care for the specimens and to do other work in that line as it should arise.

The high standing of the Department before the world, as well as the leading position already attained by American agriculture, is indicated by the selection of the second Commissioner to direct the inauguration of improved methods of farming in Japan. That people was then at the threshold of the development which has placed it among the great nations. A commission had been appointed by their Government to develop agriculture, and they chose General Capron as chief adviser. He resigned the commissioner-ship on June 27, 1871.

## COMMISSIONER WATTS'S TERM.

Judge Frederick Watts, of Carlisle, Pa., was appointed by President Grant to fill the vacancy caused by the resignation of Commissioner Capron. He had been on the bench in the ninth Pennsylvania district before the war, but in 1858 abandoned the law for farming. He was a native of Carlisle, and a graduate of Dickinson College. He was the first president of the Pennsylvania Agricultural Society, and for twenty-seven years was president of the Cumberland Valley Railroad Company.

Commissioner Watts found in operation the Divisions of Chemistry, Garden and Grounds, Entomology, Statistics, and Botany.



FREDERICK WATTS,  
Commissioner of Agriculture.  
1871-1877.

This brief roster affords an interesting comparison with that which represents the Department organization at the date of the issue of this publication shown on pages 47-55.

In his first report the Commissioner recommended that the number of copies of the annual report for gratuitous distribution be greatly reduced, and that the remainder be deposited with the Public Printer for sale at the cost of printing and postage.

The cultivation of ramie on an extensive scale had been undertaken in the South, and

Commissioner Watts urged that planters should push this industry together with the raising of jute.

**New work undertaken.**—The Division of Microscopy was established in 1871 by the appointment of Thomas Taylor, Microscopist. Early among his services was an investigation of the cranberry rot in New Jersey. He also soon made a study of mushrooms, and suggested the cultivation of them as a profitable business. Other subjects investigated by him were mildews on grapes, yellows in peaches, and black knot on plums.

Commissioner Watts was the first to give much attention to timber interests. He had sections of the most valuable trees of the country on exhibition at the Centennial Exposition, and in 1877 secured an appropriation for a forestry investigation. Mr. Franklin B. Hough, of Pennsylvania, was appointed special agent in charge of the work. This was a beginning of the Forestry Division which was fully organized several years later.

The Centennial Exposition brought large donations from foreign governments for the museum, so that the space allotted to it had to be nearly doubled. Contributions were received from Great Britain, Australia, Japan, Egypt, Norway and Sweden, the Netherlands, Brazil, Argentina, Chile, and Mexico. Large additions were also made about this time to the herbarium. Charles Richards Dodge, then assistant entomologist, estimated that the museum collections were worth \$100,000. Models of fruits and water-color drawings formed an interesting part of the display.

**Weather reporting transferred to the War Department.**—Commissioner Watts stopped the publication in the monthly reports of the meteorological summary and notes furnished by the Smithsonian observers without analysis and explanation, and suggested that the work be turned over to the Signal Service of the Army. In response Congress, on June 10, 1872, made an appropriation with which the War Department was directed to collect and publish meteorological information for the benefit of agriculture.

The Division of Statistics at this time had about 3,000 voluntary correspondents. Commissioner Watts in his report for 1876 called attention to the fact that the appropriation for this division had been cut from \$15,000 to \$10,000, declaring that the work had been thereby greatly crippled. The appropriation was restored to the usual amount the following year. Commissioner Watts complained of delay in the publication of his annual report. He was also hampered by the abolition of the franking privilege for the distribution of the report.

The ravages of the grasshoppers in the West began about this time and the Department sent out \$30,000 worth of seeds to the devastated districts. This was under a special appropriation.

#### COMMISSIONER LE DUC'S TERM.

Hon. Wm. G. Le Duc, of Hastings, Minn., was appointed Commissioner of Agriculture by President Hayes, and assumed control on July 1, 1877. He took strong ground against the indiscriminate distribution of common seeds. In his first annual report he cited the sections of the Revised Statutes bearing upon the subject, and pointed out in italics that the distribution "shall be confined to such seeds as are rare and uncommon to the country." It was plain, he urged, that the law did not contemplate the sending out of such seed as may be bought of seedsmen generally. He made a comparison of the small appropriations for the Department with the sums given other branches of the Government, and asked for more liberal treatment. He also pointed out the need of a general index for the annual reports of the Department. Such an index,

completing earlier indexes, was prepared in 1895-96 in the Division of Publications by George F. Thompson.

**Investigation of animal diseases.**—Under a special appropriation of \$10,000 in 1878 Commissioner Le Duc directed an investigation of diseases among hogs and other domestic animals, and in his annual report called attention at length to pleuro-pneumonia among cattle, which had already secured a wide foothold in this country. The inquiry into animal diseases was kept up during his term with increasing energy. A careful study was made of glanders and farcy. At the same time an investigation of the history and habits of insects important in agriculture was maintained under a special appropriation of \$10,000, renewed by succeeding Congresses.



WM. G. LE DUC,  
Commissioner of Agriculture.  
1877-1881.

An international exposition at Paris took place at this time and the Department received \$15,000 with which to make its exhibit. Professor McMurtrie, the Department chemist, was placed in charge. A creditable showing was made, though, as Commissioner Le Duc stated, the money was available too late to secure the best results.

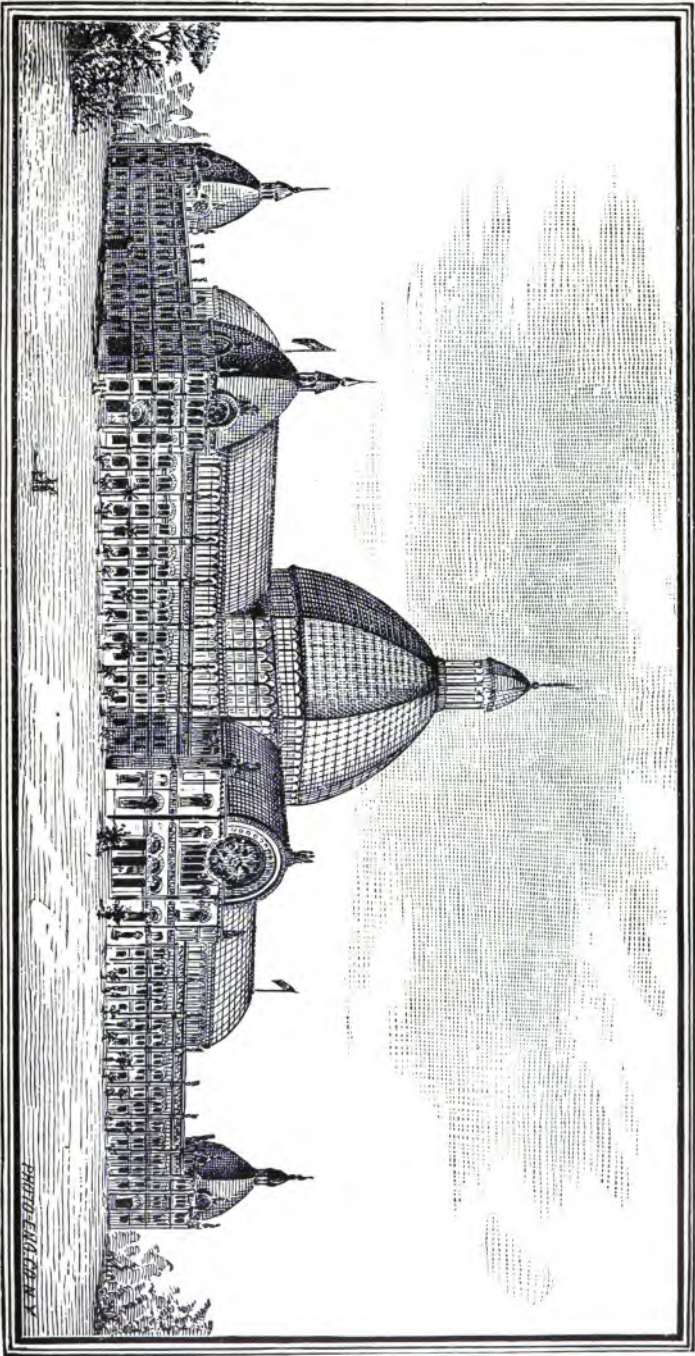
**Experiments with sorghum, and other work.**—The production of sugar, both from sorghum and from beets, received much attention, and under a special appropriation for machinery,

etc., considerable experiments with sorghum were conducted at Washington. Commissioner Le Duc was unable to obtain there a supply of properly grown canes, and asked for the purchase of 1,000 acres of ground in the vicinity upon which the Department might grow its own material for the experiments, and conduct an experimental farm. He also wished that auxiliary experimental farms should be established in each of the States.

Irrigation, which had received some attention in the report of 1874, was beginning to enlist much interest, and \$20,000 was appropriated by Congress in 1880 for experiments with artesian wells.

Commissioner Le Duc got an appropriation of \$15,000 for investigation of tea culture, and leased a farm in South Carolina for the purpose of experimenting, and to propagate plants for general distribution. He believed that a few years would develop a large industry of tea growing in the Southern States.





DESIGN FOR DEPARTMENT BUILDING AS PROPOSED BY MR. LE DUC IN 1880.



In spite of his opposition to the distribution of common seeds, Mr. Le Duc sent out, in 1877, 2,333,474 packages, of which 943,530 went to the district ravaged by grasshoppers. He also distributed 156,862 plants, cuttings, etc., from the propagating gardens, of which 70,000 were tea plants, 3,000 olives, 1,000 coffee, and 500 date palms.

Commissioner Le Duc recommended the erection of a larger Department building on the same site. The plans approved by him were for a structure in the form of a rectangular parallelogram 500 feet by 1,000 feet, with an inclosed court for a display of agricultural implements. The view of the front of the proposed building here (Pl. I) presented was published in the report of 1880.

#### COMMISSIONER LORING'S TERM.

Dr. George B. Loring, of Massachusetts, was appointed Commissioner of Agriculture by President Garfield, and took charge on July 1, 1881. He was educated as a physician, but was postmaster at Salem, Mass., for four years ending in 1857, and from that time devoted his time to scientific farming and politics. He was president of the New England Agricultural Society for twenty-seven years prior to his death in 1891.

In his first report he stated the work of the Department as he found it as follows: Investigations of tea planting, of sugar making from sorghum, of vegetable and animal fibers, of economic insects, of irrigation by the use of artesian wells, of diseases of domestic animals, and of the agricultural condition of the Pacific coast.

The tea farm, as shown in a report by Mr. Saunders, the Horticulturist, gave little promise, and Commissioner Loring cut down the outlay in that direction as much as practicable under the lease already made. The attempt to sink an artesian well at Fort Lyon, Colorado, undertaken under Commissioner Le Duc, was abandoned. Two other wells were started on railroad lines in the plains east of Denver. The sorghum experiments were brought to a close with disappointing results as to the production of sugar. A report was secured from the National Academy of Science on the history of sorghum experiments for twenty-five years. Experiments with sorghum sirup were continued by the chemist. The distribution of sugar-beet seed on a large scale was begun and the Division of Chemistry began a series of analyses to determine the possibilities of producing sugar from beets.

**Origin of Bureau of Animal Industry.**—Commissioner Loring gave especial attention to the diseases of domestic animals, and the appropriation for investigations in that line was more than doubled. A veterinary experiment station was established at Washington under D. E. Salmon. Inquiries were carried on in Maine, Connecticut,

New York, New Jersey, Pennsylvania, Maryland, Virginia, Tennessee, Kentucky, Ohio, Indiana, Illinois, Missouri, Kansas, Arkansas, and Texas. The study of inoculation, which resulted in the discovery and use of mallein and other forms of vaccine made and distributed by the Department, was suggested in the report for 1883. The control of quarantine against diseased animals was transferred to the Commissioner from the Treasury Department. In 1884 the Bureau of Animal Industry was established by act of Congress with \$150,000 to prosecute the crusade against pleuro-pneumonia and other diseases.

The problem of silk culture was taken up anew with an appropriation of \$15,000 in 1884. A special agent was appointed to conduct experiments under the direction of the entomologist.



GEORGE B. LORING,  
Commissioner of Agriculture.  
1881-1885.

The United States Entomological Commission was transferred to the Department of Agriculture from the Department of the Interior in 1881 and continued its reports on injurious insects.

**Development of the work in statistics.**—The Division of Statistics was reorganized, with a view to a more complete and perfect system of crop reporting. The appropriation was raised in 1882 to \$80,000.

"The design is," wrote Doctor Loring in his report, "by establishing a permanent system of efficient and prompt col-

lection of current statistics to be able to present instantly and accurately the current changes in crop areas and conditions and in the production of breadstuffs, meats, industrial products, and all the results of agricultural labor."

The publication of transportation rates was begun in the monthly reports by the direction of Congress, and a European agency was established for the collection of statistics showing the prospective demand for American produce, especially grain and meats. E. J. Moffat was appointed as agent at \$2,500 a year. He had his office with the American consul-general in London.

The Bahia seedless oranges were propagated extensively in the conservatories at Washington at this time, and young plants were sent to California and other States. Mr. Saunders estimated that the Division of Gardens and Grounds was sending out yearly 100,000

plants of all kinds. Increasing quantities of seeds were distributed, reaching in 1883 a total of 2,467,230 packages, of which 76,232 packages were tobacco seed.

COMMISSIONER COLMAN'S ADMINISTRATION.

Hon. Norman J. Colman, of Missouri, was appointed Commissioner by President Cleveland, and took his place on April 3, 1885.

Norman J. Colman was born near Richfield Springs, N. Y., May 16, 1827. He obtained an academic education, then went to Louisville, Ky., where he taught school, attended the Louisville Law University, took the degree of bachelor of law and his license to practice, and located at New Albany, Ind., where he began the practice of his profession in partnership with M. C. Kerr (his former room and class mate), who became Speaker of the House of Representatives of the United States and died while holding that office. They soon obtained a fine practice, and Mr. Colman was elected district attorney, which office he held one year, and then removed to St. Louis, Mo., continuing the practice of his profession. But having a strong love for rural pursuits, he purchased a country home, and began the publication of an agricultural paper under the name of Colman's Rural World. In the civil war he was a Union man, and lieutenant-colonel of the Eighty-fifth Regiment of Enrolled Missouri Militia.



NORMAN J. COLMAN,  
Commissioner and Secretary of Agriculture.  
1885-1889.

In 1865 he was elected to the Missouri legislature. In 1868 he was nominated by his party (Democratic) for lieutenant-governor, but with his entire party ticket was defeated. In 1874 he was again nominated for lieutenant-governor and was elected. He was a member of the board of curators of the State University for sixteen years. He was president of the State Horticultural Society, of the State Live Stock Breeders' Association, of the State Board of Agriculture, and of many other State and National associations organized to advance the interests of the farmer. In 1885, when appointed by President Cleveland to be United States Commissioner of Agriculture, he enlarged the sphere of the Department, adding several important divisions. Under his administration it became one of the Executive Departments of the Government on February 9, 1889,

and he was appointed by the President the first Secretary of Agriculture. On his retirement from the office Mr. Colman received from the President of the Republic of France, through its minister of agriculture, the Cross of "Officier du Merite Agricole," accompanied by a gold medal and the decoration of the order.

**Office of Experiment Stations.**—Mr. Colman took a deep interest in the plan being pushed at this time by Representative Hatch for the establishment of agricultural experiment stations in all the States. He called a meeting of the leading men of the agricultural colleges and existing experiment stations, at which the need of Federal aid for experiments and a central office in the Department with advisory duties was made prominent. In accordance with the opinions expressed at this convention the Hatch bill, which became a law in 1887, made it a part of the duty of the Commissioner of Agriculture "to furnish forms for the tabulation of results of investigations or experiments; to indicate, from time to time, such lines of inquiry as to him shall seem most important; and, in general, to furnish such advice and assistance as will best promote the purposes of this act." For this purpose an office was established, known in the Department as the Office of Experiment Stations, under a chief who is styled director. The publication of a periodical, such as the present Experiment Station Record, was recommended.

**New divisions established.**—The Division of Pomology and the Division of Ornithology and Mammalogy were established under Commissioner Colman. The latter was in response to a demand for an investigation of the damage done to crops and fruits by birds, especially the English sparrow and bobolink, or rice bird.

The section of vegetable pathology was formed in the Division of Botany. A station was established at Aurora, Ill., for the study of apiculture. The irrigation inquiries were continued and a report was made on what had already been done. The study of public highways was begun.

The question of reeling silk from the cocoons at a cost sufficiently low to permit competition with cheap foreign labor was taken up, and reeling rooms were established at New Orleans, La., Philadelphia, Pa., and Piedmont, Cal. These were discontinued after a year, and the work was carried on at Washington, D. C.

Commissioner Colman, in his reports, suggested the commercial cultivation of medicinal and similar plants, naming rhubarb, licorice, arnica, belladonna, digitalis, poppy, ginger, cinchona, vanilla, jalap, and sarsaparilla. He called attention to the possibilities of agriculture in Alaska, the rapid inroad upon the forests for supplying railroad ties, and the planting of trees in the plains.

**Scientific discoveries.**—The sale of counterfeit butter was arousing the interest of farmers, and prosecutions under the law forbidding it were in progress. Doctor Taylor, the Department microscopist, reported the discovery of characteristic differences between the crystals of lard, beef fat, and butter, as seen under the glass. This discovery was recognized in a report of the American Association of Microscopists as a valuable factor in the determination of the genuineness of butter offered for sale. The application of scientific methods to sugar making was successfully carried out, the diffusion process was tried in making sugar from cane, and a resultant increase in the yield of 40 pounds of sugar to the ton of cane was reported.

**War on contagious diseases.**—The Bureau of Animal Industry lacked State cooperation in exterminating contagious diseases, because the whole burden of destroying infected animals was thrown upon the State. In 1887 legislation was secured remedying this defect in the law and appropriating \$500,000 for the Bureau, with a provision that any part of the money might be used to pay for animals it was found necessary to kill. Good progress was at once made in stamping out pleuro-pneumonia. Within the first year 35,451 herds, over 300,000 head, were inspected, and 8,139 animals were slaughtered and paid for. The total expenditures of the Bureau for 1888 were \$499,975.32, against \$99,985.56 in 1887.

#### THE DEPARTMENT RAISED TO THE FIRST RANK.

On February 9, 1889, the Department was raised to the first rank in the executive branch of the Government.<sup>a</sup> This was largely due to the efforts of the National Grange, an organization founded in 1868 by gentlemen connected with or specially interested in the Department.

At the meeting of the National Grange in Chicago, in 1876, resolutions were passed asking the recognition of the work as of equal importance with any branch of the service. In part these resolutions were as follows:

Whereas the agricultural masses compose one-half of the population of the free States of America upon whom ultimately rest the taxes which sustain the Government. \* \* \*

*Resolved,* That American agriculturists demand that they shall be recognized as a real factor in the Government by the establishment of a bureau of agriculture, to be presided over by a Cabinet officer, who shall organize the same upon a plan to be devised by the wisdom of Congress, which shall embrace to the fullest the agricultural interests of 20,000,000 of people. \* \* \*

The resolutions were passed on November 25, when the result of the Presidential election of that year was still in doubt. All members of the organization pledged themselves in support of the movement, irrespective of political affiliations.

The work of the Department was at this time treated slightly by many Congressmen, and was considered merely as a means to reach

<sup>a</sup> See page 58 for text of law.

many constituents with small favors by the distribution of seeds and books. The clerkships and other positions in the Department were regarded as patronage to be given to political adherents, with little regard for fitness. So notorious was this condition that the Grange leaders at one time seriously discussed the propriety of asking that the Department be abolished entirely.

But Commissioner Le Duc, when appointed by President Hayes, took up the duties with such earnestness and vigor that the Grange rallied to his support. Congressmen were impressed with the seriousness of the work for which the Commissioner asked appropriations, and at the close of his term the supply of money was made more liberal.

The demand that the head of the Department be given a place at the President's council table was pressed persistently by the National Grange, and was finally taken up by the Farmers' Congress and other influential bodies and by so many persons interested in public affairs that public opinion became fixed in favor of the change, and it was made.

The office of Commissioner having been abolished, Mr. Colman was appointed Secretary, and held the position a little less than a month.

#### SECRETARY RUSK'S ADMINISTRATION.

Hon. Jeremiah M. Rusk was selected by President Harrison as his Secretary of Agriculture and took control on March 7, 1889. The sketch of his life in the Congressional Directory of that year says: "General Rusk was born in Morgan County, Ohio, in 1830. He was educated in the common schools of the neighborhood, which he attended winters, working on the farm in summer. He continued to reside on the farm until his removal to Wisconsin in 1853, since which time—with the exception of a short time—he has been engaged in farming. He held several county offices in Wisconsin; was a member of the legislature of that State in 1862; was commissioned major of the Twenty-fifth Wisconsin Volunteer Infantry in July, 1862, and was soon after promoted to the colonelcy. He served with General Sherman from the siege of Vicksburg till mustered out at the close of the war, and was brevetted brigadier-general for bravery at the battle of Salkehatchie. He was elected bank comptroller of the State of Wisconsin in the year 1866, and reelected in 1868; was elected to the Forty-second, Forty-third, and Forty-fourth Congresses, and was chairman of the Committee on Invalid Pensions in the Forty-third Congress. He was a member of the Republican Congressional Committee for several years, and was a delegate to the National Republican Convention in 1880. He was appointed by President Garfield and confirmed by the Senate as minister to Paraguay and Uruguay, which appointment he declined and was also tendered by President



Garfield a mission to Denmark and the position of Chief of the Bureau of Printing and Engraving, both of which he declined. He was elected governor of Wisconsin in 1881, reelected in 1884, and reelected for a third term in 1886. He was appointed Secretary of Agriculture on March 4, 1889."

In reorganizing the Department Secretary Rusk divided the work into two main classes: Executive, under the immediate charge of the Secretary; and scientific, under the Assistant Secretary, Mr. Willits, that office having been just then created.

Edwin Willits was born at Otto, Cattaraugus County, N. Y., on April 24, 1830. His family removed to Michigan in 1836, and there he grew up and received his education in the public schools. He graduated from the State university at Ann Arbor in 1855, and returning to his home at Monroe took up the study of law. He was admitted to the bar in 1857 and immediately began practice. While studying law he was editor of the Monroe Commercial, and continued that work till 1861. He was county prosecuting attorney in 1860-62, a member of the State board of education from 1860 to 1872, and postmaster at Monroe from 1863 to 1866. Another important public service was as member of the commission to revise the State constitution in 1873. He was the Representative in Congress from the Monroe district in the Forty-fifth, Forty-sixth, and Forty-seventh Congresses. He became president of the Michigan Agricultural College in 1885, and entered upon the duties of that office upon the close of his third term in Congress. From this work he was called by President Harrison to be the first Assistant Secretary of the Department. After he retired from office in 1893 he was engaged in literary work in Washington till his death in 1896.



JEREMIAH M. RUSK,  
Secretary of Agriculture.  
1889-1893.

**First of the Farmers' Bulletins.**—Mr. Rusk urged the necessity of placing the information gathered by the Department more generally in the possession of farmers and established the Division of Records and Editing, now the Division of Publications, under Mr. George William Hill, its present chief, to edit and supervise publications and administer the printing fund. He recommended the publication of the Farmers' Bulletins' which have since become so popular. The

work to be done in these he summarized as follows: Frequent publication of the results of scientific work and the circulation of the information among practical farmers, insuring its direct application to actual farming operations. He insisted that the language employed in the bulletins should be intelligible to farmers generally. In addition he planned the publication by press associations, newspapers, and agricultural periodicals of advance reports of the important conclusions reached by experiment and research. In this way he believed the great majority of the farmers of the country would be promptly reached. The demand for Farmers' Bulletins grew rapidly from the start. Several have run over 700,000 in their distribution, and one has exceeded 1,000,000.

**Investigation of foreign markets.**—Mr. Rusk began the systematic investigation of foreign markets for American products, procured a special appropriation for the purpose, and for some years a special agent was maintained in Europe. This gentleman, Col. Charles J. Murphy, gave particular attention to the introduction of corn meal for bread among the people of Europe and in the armies of the Continent.

**Pleuro-pneumonia eradicated.**—The Bureau of Animal Industry grew steadily. Complaints were made by foreign Governments that American meats came very frequently from diseased animals. Restrictions were put upon their importation and in some cases absolute prohibition was enforced. The meat was generally subjected to Government inspection on its arrival in Europe, and as there was no inspection on this side no reply could be made to assertions that it was diseased. Secretary Rusk obtained authority to make inspections and money to pay for them. Soon after this system of inspection was fully in operation the prohibition against American pork in Germany was withdrawn. The number of animals inspected in 1892 was 5,076,929. The total expenses of the bureau were increased from \$469,113.35 to \$649,980.91. The bureau was reorganized at this time and its work assigned to subdivisions as follows: Animal pathology, field investigations and miscellaneous work, and quarantine. The fight against infectious diseases was energetically pushed, and on September 26, 1892, Secretary Rusk announced that the country was entirely free from contagious pleuro-pneumonia.

**Inspection of American cattle in England.**—In 1890 inspection of American cattle by American inspectors stationed in Great Britain was inaugurated. This was necessary in order to check reports of disease in cattle arriving in that country from the United States. With the aid of Minister Robert Lincoln arrangements were made to have all cases of disease examined by American as well as English veterinarians. This led to animated discussions between the two sets of inspectors as to the nature of the malady discovered. Many cases

reported by the English officials as pleuro-pneumonia were shown by the American inspectors to be only broncho-pneumonia, a non-contagious form of lung disease. In every case, moreover, by a system of tagging the cattle for identification, it was shown that the cattle so condemned had never been exposed to pleuro-pneumonia. The condemnations soon ceased.

**Improvement in transportation of cattle by sea.**—In 1891 Mr. Plimsoll, whose work for the English sailor had established his reputation as a philanthropist, came to this country to lecture against the inhumanities attending the transportation of American cattle to England. That such inhumanities existed was notorious, and Mr. Plimsoll's crusade was greatly encouraged from selfish and interested motives by British stockmen who believed that the effect of the agitation would be unfavorable for the marketing of American cattle. A bill was quickly drawn at the Department after a consultation between members of Congress interested and the Department authorities. This was pushed through at the close of the session and approved on March 3, 1891. It placed the supervision of the cattle quarters of all vessels engaged in the trade under the control of the Secretary of Agriculture. So effectual did this legislation seem to be that Mr. Plimsoll was satisfied and gave up his self-imposed mission. The results have been found so satisfactory that insurance rates on cattle have been reduced from \$8 to \$1 per head. Basing the calculation upon average annual shipments, this represents a saving of millions of dollars yearly.

**Texas fever.**—Texas fever among cattle was got under control. The disease had occasioned heavy losses and had baffled all efforts at prevention except by strict quarantine against Texas cattle at certain seasons and under certain conditions. Its appearance was attended with considerable mystery. Stockmen and veterinarians alike had been watching it closely for more than twenty years, and all were puzzled by some of the facts observed. The solution of the most important question in the connection is told in the report of the Bureau of Animal Industry for 1890, as follows:

It has long been suspected by cattle owners that the appearance of the disease in Northern cattle was in some way connected with the ticks distributed by Southern cattle. This hypothesis has, however, been generally discredited by scientific men, and indeed the evidence in favor of it was very slight and intangible. It seemed, however, worthy of investigation, and the result has been to obtain indisputable evidence that the disease is produced by ticks from Southern cattle.

Ticks taken from Southern animals and placed upon pastures which could have been infected in no other way so infected these grounds that susceptible cattle placed upon them contracted the disease in the same length of time and were as seriously affected as were other susceptible cattle placed upon pastures in company with Southern cattle. Again, young ticks that were hatched from the eggs of large ticks picked from Southern cattle were placed upon susceptible animals and produced the disease.

**Establishment of the Weather Bureau.**—The Weather Bureau was established as a part of the Department service in 1891 by transfer of the work, with men, buildings, and apparatus, from the War Department. Prof. Mark W. Harrington was appointed chief, and organized the new branch in its present quarters at Twenty-fourth and M streets NW., Washington, D. C. The necessary substations of the War Department Signal Service throughout the country were turned over to him. Six hundred new stations were added within a short time, bringing the total up to 1,200, and in three months the cooperative observers had increased to 2,200. Plans were made and put in execution as rapidly as possible for increasing the usefulness of the Bureau to commerce and agriculture by extending the system of frost, flood, and storm warnings and otherwise reaching all classes of the people. Local forecast officials were appointed in more than twenty cities, and they were directed to give out forecasts and warnings for their localities based on their information as related to local conditions. The cost of the service for the first year was \$861,840.83.

**Experiments and improvements.**—In the Fifty-first Congress \$70,000 was appropriated for irrigation experiments in the region from Dakota to Texas along the eastern base of the Rocky Mountains. Hundreds of artesian wells were sunk, and the problem of the use of the underflow was considered, though not investigated, and a report on the whole subject was made in 1892.

Experiments in sugar production were continued by the distribution of 15,000 packages of sugar-beet seed to 8,000 farmers and by the examination of varieties of sorghum with a view to securing that which would yield the largest amount of sugar. The experiments with beets were not successful chiefly because of a lack of care by farmers in cultivation and in taking samples for analysis.

The importation of parasite enemies of scale insects was begun, and the citrus-fruit groves of California were saved from threatened destruction by the scale pests through the successful introduction of a ladybird (*Vedalia cardinalis*). An effort was also made to introduce parasites for the destruction of the Hessian fly.

Experiments in rain making by use of explosives in the arid regions were made under a special appropriation by Congress, but were unsuccessful.

The investigation of silk reeling was continued for a time, but in 1891 the experiments were discontinued. The industry was found hopeless except with constant aid. The destruction of live-forever as a troublesome weed in some of the Eastern States was accomplished by means of a parasitic fungus. Valuable botanical investigations were made, and 12,000 specimens were added to the herbarium.

## SECRETARY MORTON'S ADMINISTRATION.

Hon. J. Sterling Morton became Secretary of Agriculture on March 7, 1893. He was born April 22, 1832, in Jefferson County, N. Y., of Scotch-English origin. His ancestors came to this country in the first vessel after the *Mayflower*, one of them, Nathaniel, being secretary of the colony. His parents removed to Michigan when he was 2 years old, and he was educated in the public schools of Albion, the State University at Ann Arbor, and Union College, from which latter institution he was graduated. He was connected editorially with the *Detroit Free Press* and *Chicago Times*; located in Nebraska November 10, 1854, at Bellevue, and April 12 of the following year issued the first number of the *Nebraska City News*; was elected to the Territorial legislature and reelected in 1857; was appointed secretary to fill the vacancy caused by the death of Governor Thomas B. Cuming in 1858, and served till May, 1861; in 1860 was nominated for Congress and was given the certificate of election, but was unseated by contest; in 1866 was nominated for governor and was defeated by 145 votes, and was afterwards the nominee of his party for that office three times; was the favorite candidate of his party several times for United States Senator; was a practical agriculturist and horticulturist, and contributed largely to the best literature on those subjects. He was the author of the Nebraska Arbor Day legislation, which provides that one day in each year be made a public holiday and be devoted to tree planting, and which has been adopted in forty-two States. He was appointed Secretary of Agriculture by President Cleveland and confirmed by the Senate on March 6, 1893. He died on April 27, 1902.

President Dabney, of the University of Tennessee, was appointed Assistant Secretary of Agriculture on January 1, 1894, and held the place until March 22, 1897, when he became a special agent. He remained in the Department till December 31, 1897.

Charles W. Dabney was born at Hampden-Sidney, Va., on June 19, 1855. He received his early education in his native town and graduated from Hampden-Sidney College in 1873 and from the University of Virginia in 1877. He then went to Germany and studied at the University of Berlin and the University of Goettingen in 1878-80 and received the degree of doctor of philosophy. He also received the honorary degree of doctor of laws successively from Yale and Johns Hopkins in 1901 and 1902. Soon after his return from his studies in Europe he was made professor of chemistry in the University of North Carolina and State chemist. Later he became director of the North Carolina experiment station, and when the Cotton States Exposition was held at New Orleans in 1884-5 he was chief of the department of Government and State exhibits.

Doctor Dabney discovered the phosphate deposits in eastern North Carolina and tin deposits in western North Carolina, and took part in the establishment of the North Carolina College of Agricultural and Mechanical Arts. He was made director of the Tennessee Agricultural Experiment Station and president of the University of Tennessee in 1887, and held that place till called to his present position as president of the University of Cincinnati in 1904.

**Development and reorganization of work.**—The Secretary called attention in his first report to the need of a closer supervision of the State experiment stations and better control of the Federal money appropriated for them. In response a law was passed directing an inspection of the stations and their accounts of the use of Government money. This was welcomed by most of the station authorities and

was accomplished with good results. The law gave the Secretary power to prescribe the form of annual statements and directed him to ascertain whether expenditures conformed to the requirements of the law of 1887.



J. STERLING MORTON,  
Secretary of Agriculture.  
1893-1897.

Secretary Morton reorganized the Division of Illustrations as a section of the Division of Records and Editing. Subsequently the latter became the Division of Publications, and the document and folding room was also reorganized and made a section of this division. During this administration, also,

the first special appropriation was made for the printing and distribution of Farmers' Bulletins, with a provision that two-thirds of the total number of these bulletins printed are to be distributed by Members of Congress. The number of publications issued, which had increased 300 per cent during Secretary Rusk's administration, again increased over 200 per cent under Mr. Morton, while the increase in the aggregate number of copies printed was still greater. Considerable attention was given to enlarging the Department library, and the suggestion was made by Secretary Morton that the Librarian of Congress should transfer to the Department library one of the duplicate volumes furnished him under the copyright law whenever on agricultural subjects.

The Division of Statistics was organized into three sections as follows: Compilation and foreign statistics; answers to Congressional

inquiries and verification of agricultural statistics; records, files, and comparison of crop reports.

The Division of Agrostology was formed, and consular agents throughout the world were requested to send to the Department seeds of new forage plants whenever found. The Handbook of Grasses of the United States was its first important publication.

The Division of Soils was formed as part of the Weather Bureau. The special need for it was in the demand for information in regard to the relation of soils to meteorological conditions. The Office of Road Inquiry was also established at this time in answer to a general demand for the study of public roads and their improvement. The development of the use of the bicycle contributed notably to this demand. The Division of Microscopy was abolished and its work distributed to the other divisions. A Dairy Division in the Bureau of Animal Industry was established on July 1, 1895, with H. E. Alvord as chief.

The special agents in Europe employed under the special appropriation for extending the demand in foreign markets for agricultural products of the United States were withdrawn, and a new departure made by the organization of a separate section under the Secretary's personal direction for the collection and diffusion of information in regard to the requirements and productions of foreign countries.

The irrigation inquiries were brought to a close and the office discontinued.

**Columbian Exposition—Discoveries and advances.**—The Columbian Exposition came just at the beginning of this administration. The preparation of the Department exhibit had been placed in the hands of Assistant Secretary Willits under Secretary Rusk, and he was subsequently appointed by President Harrison chairman of the Government Board. He was continued in charge till the Exposition closed and the work was wound up. Of the total expenditures by the National Government for representation at this Exposition the Department's share, as reported by Mr. Willits, was \$131,707.71.

The Bureau of Animal Industry devoted considerable time to the study of Texas fever, sheep scab, and tuberculosis; the protection of human life from the dangers of tuberculous diseases was undertaken actively. Inspections of beef and milk were made for this purpose, and directions for the sterilization of milk were sent out for general information. It was at this time decided that inspectors in the Bureau service must pass a civil-service examination, and must be veterinary graduates.

The Weather Bureau made arrangements with the Mexican Government Observatory for exchange of data, and also established a cyclone service in the West Indies. Provision was also made for daily reports by cable from islands of the North Atlantic Ocean and points

in Western Europe. The period covered by forecasts was considerably extended, and large additions were made to the number and efficiency of weather observers.

Under the special appropriation for the purpose, nutrition investigations were undertaken in connection with the Office of Experiment Stations under the direct supervision of W. O. Atwater.

Incidentally to these investigations large profits were disclosed in the baking and supply of bread. It was shown that while flour had fallen much in price bread had not changed, and for a time in many cities a reduction was secured in the price of the loaf.

A valuable discovery was made in the Forestry Division, viz, that boxing the pine tree for turpentine does not injure the lumber. The knowledge of this fact is estimated to be worth \$2,000,000 to the timber interests. During the course of the timber-test work the longleaf pine was found to be much stronger than had been previously supposed.

**Civil Service—Savings.**—Secretary Morton greatly encouraged the extension of civil-service regulations throughout the Department, and in two notable cases adopted the method of competitive examinations to fill important places which were expressly excepted. The number of persons in the classified service increased notably under him.

In his last report Secretary Morton makes the following summary, showing the amounts saved by him from the appropriation bills:

"Thus there will have been covered back into the Treasury since March 7, 1893, two million sixty-six thousand six hundred and sixty-one dollars and nineteen cents (\$2,066,661.19) out of a total amount of eleven million one hundred and seventy-nine thousand four hundred and fifty-five dollars and forty-five cents (\$11,179,455.45) on hand and appropriated."

Mr. Morton strongly recommended that the amount so saved be applied to the erection of a new and suitable Department building.

Secretary Morton was strongly opposed to the distribution of seeds, and recommended that the practice be abandoned. He succeeded in changing the method of distribution, so that the packages were no longer sent out from Washington by a force of Department employees, but from the warerooms of the seedsmen holding the contracts.

**Yearbook—Expositions.**—Beginning with that of 1894, the form of the Annual Report of the Department was radically changed in accordance with the act governing the public printing and binding, approved January 12, 1895, so as to appear in two parts. The second and most important part is known as the Yearbook, and the first and two succeeding Yearbooks were edited by Doctor Dabney, who, like his predecessor, Mr. Willits, was specially charged with the supervision of the scientific work. Succeeding Yearbooks have been issued under the supervision of the Department Editor, Geo. Wm. Hill.



To the Columbian Exposition in Chicago succeeded an Interstate Exposition at Atlanta, Ga., in 1895, and an Exposition at Nashville, Tenn., in 1897. At both of these Doctor Dabney was the representative of the Department of Agriculture and was also appointed chairman of the Government Board.

#### SECRETARY WILSON'S ADMINISTRATION.

James Wilson, of Traer, Iowa, became Secretary on March 5, 1897, by appointment of President McKinley, and has held the position nearly four years longer than any of his predecessors. Congress has shown its appreciation of his services by constantly increasing appropriations which have encouraged a large and well-ordered extension of the Department activities. The appropriation for the fiscal year ending June 30, 1907, is \$9,932,940, against \$2,448,332 for that ended June 30, 1897, while the number of employees on July 1, 1906,<sup>a</sup> was 6,242, against 2,043 on July 1, 1897.

Col. J. H. Brigham, of Delta, Ohio, was appointed Assistant Secretary on March 22, 1897, and continued in office till his death on June 29, 1904.

Joseph Henry Brigham was born at Lodi, Ohio, on December 12, 1838. He was educated in the common schools of the State with one term each at Berea University near Cleveland and at the normal school at Lebanon, Ohio. He served through the civil war, rising from a private to be colonel of the Twelfth and Sixty-ninth Ohio regiments. After the war he engaged continuously in farming until his death. He held several county offices and was in the State senate. He was for six years a member of the Ohio State board of agriculture and one year its president, and he was appointed by William McKinley when governor of Ohio to be president of the State board of managers of the penitentiary. He was an early member of the Patrons of Husbandry and for nine years master of the National Grange.

Colonel Brigham was the Department representative at many public meetings in the interest of agriculture and was chairman of the Government board at the national expositions occurring during his term of office. These were the Pan-American at Buffalo in 1901, the Louisiana at St. Louis in 1904, and the Lewis and Clark at Portland, Oreg., for which preparations were actively progressing at the time of his death.

Prof. W. M. Hays, of the University of Minnesota, was appointed Assistant Secretary of Agriculture by President Roosevelt on December 19, 1904.

Willet Martin Hays was born in Hardin County, Iowa, on October 19, 1859. In boyhood he attended a country school near Gifford in

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<sup>a</sup> Appointments since that date number nearly 1,283, making the total about 7,525 on December 31, 1906. Many of the new appointees are meat inspectors.

his native county. He was in Oskaloosa College, 1878-1880; Drake University, 1882-83; and Iowa Agricultural College, 1883-1886. He received the degrees of bachelor and master of agriculture from the Iowa school in 1885 and 1895. He was assistant professor of agriculture in Iowa Agricultural College in 1886; assistant editor of the *Prairie Farmer*, 1887; 1888-1891, professor of agriculture, University of Minnesota, and agriculturist, Minnesota Experiment Station; held the same positions in North Dakota Agricultural College and Experiment Station in 1892-93; and in 1894 returned to his former place in Minnesota, where he remained till selected for Assistant Secretary by the President. Part of this time he was resident director of the Experiment Station.

Professor Hays devised methods of breeding wheat, corn, flax; alfalfa, and other field crops now widely used by breeders throughout the world; he also devised methods of studying and teaching the subject of farm management; and aided in the establishment of education in dairying and live stock husbandry. He has been a pioneer in urging the introduction of the elements of agricultural science early in the courses of study in the rural schools, and was one of the first to move for the establishment of the Minnesota system of agricultural high schools.

He is a member of the American Association of Agricultural Colleges and Experiment Stations, of the American Association for the Advancement of Science, and is on the industrial education committee of the National Education Association. In 1900 he organized the American Breeders' Association, of which he is secretary.

**Changes in organization.**—Very notable changes have been made within the Department of Agriculture since 1897. The naturally allied services of plant-disease and plant-breeding investigations, botanical investigations, pomological investigations, horticultural investigations, and seed and plant testing and distribution were brought into a well-proportioned unity in 1900 as the Bureau of Plant Industry, and to these lines several kindred branches of work have since been added. Important among these latter are the branches of farm management and drug and poison plant investigations.

The Bureau of Forestry was about the same time organized from the division of the same name, and under a new chief put itself in communication with owners of wooded lands, large and small, all over the country. More recently this service has been greatly augmented by the transfer of the national forest reserves and other forested lands to its control. With these enlarged duties the Forester's corps of workers under the new name of the Forest Service has spread over the entire country, and he has an income from the reserves which is

expected eventually to pay for the entire service under his direction. In 1905-6 it amounted to about \$700,000, of which 10 per cent goes to the States where the reserves lie. This office has also been called to aid in an advisory way in the management of the important forest interests of Porto Rico, Hawaii, and the Philippine Islands.

Other branches of the Department which have been changed within the period indicated from a divisional to a bureau organization with large increase of activities are the Bureau of Chemistry, Bureau of Soils, Bureau of Entomology, Bureau of Statistics, and Bureau of Biological Survey. The present organization and lines of work of these and other divisions of the Department may be found on page 47.

The work of the Bureau of Animal Industry has been much **enlarged** by the addition of a butter-inspection service, and that of the chemist by **putting** in his charge the inspection of imported food products.

The Office of Fiber Investigations **was** discontinued in 1898 and the work was transferred to the Division of **Botany**.

The Division of Foreign Markets was **organized** separately from the Division of Statistics in 1898, with Frank H. Hitchcock as chief, and in 1904 was joined with that division to form the Bureau of Statistics.

A Solicitor for the Department was first provided for in the appropriation bill approved on March 3, 1905.

The museum was put in storage in 1904, when the house in which it was kept was torn down to make room for the new Department building.

**New industries.**—Secretary Wilson in his first report announced it as his policy "to encourage the introduction of what will enable our people to diversify their crops and keep at home money that is now sent abroad to buy what the United States should produce." His attention was early called to the large purchases of sugar from regions no better adapted to sugar production than are parts of the United States. He at once imported a supply of beet seed and set the chemist, with the aid of a special agent, to determine what sections of the country will grow beets of a high sugar content. This was followed by the systematic encouragement of sugar-beet growing. From this beginning beet-sugar production in the United States has increased from 37,536 tons in 1897 in only four States to 312,920 tons in 1905 in twelve States. This, of course, means the eightfold increase of the manufacturing industry hand in hand with the growth of beet farming.

Also from the beginning renewed interest was taken in the tea-culture experiments in South Carolina which had been abandoned by Commissioner Loring early in his term, but had been continued by

private efforts of Dr. Charles U. Shepard at Summerville, S. C. In a like manner in 1903 the silk investigations, which had been discontinued under Secretary Rusk in 1891, were again begun with the hope that new developments in the production of the cocoons and in reeling the silk with the aid of French experts might open a profitable field for American enterprise. In both these cases the great popular interest continuously manifested furnished a warrant for Government activity.

**New crops.**—Agricultural explorations for the purpose of discovering new crops, new varieties of old crops, new methods of cultivation and farm management, new species of desirable domestic animals, and new means of combating diseases of animals and plants and injurious insects, formed an important feature of the period from 1897 to 1905. Early in this was the examination of Russian fields for new kinds of wheat suited to the arid west. As a result durum wheats were introduced in the Northwest and now yield 25 million bushels a year for macaroni making and other special uses. In the South, Egyptian cottons were introduced and have proved valuable, especially in crossing for superior new breeds; while in Arizona and California date growing and fig production were placed on a commercial basis. In the latter the problem was solved by the importation of the fig fertilizing insect to which the Smyrna fig industry largely owes its success. Rice production was established in the tide lands of Louisiana and Texas by the importation of Kiushu rice from Japan and the use of irrigation in growing it. In Arkansas, rice growing has since been made successful on the upland prairies by use of wells for irrigation. In addition many other successful innovations have been spread among progressive farming communities all over the country. Such are alfalfa, emmer, millet, new varieties of oats and barley, new fruits, and new breeds of animals, such as Angora and milch goats. Special work has just begun looking to the establishment of a breed of carriage horses of a high grade of excellence, with the stallion Carmon as the founder of the line. The growing of alfalfa has been actively encouraged and very wide interest awakened east of the Mississippi, where this important forage plant had been neglected for many years.

**Plant breeding.**—At no time in the history of this country probably has there been such activity both in the Department and in private hands in the production and improvement of economic plants of special value by selection of seed and scion and by hybridization. The citrus fruits have received particular attention in the Bureau of Plant Industry. Among the new productions in that line are three citranges, originated by crossing the sweet orange and the trifoliate orange; two new tangerines, and a tangelo, the latter a hybrid of the pomelo and the tangerine; a large blood orange, and two seedling

limes of superior merit. Two new pineapples have also been produced, and, by grafting on hardy stocks, fine wine-making grapes of southern Europe have been successfully grown in Florida and North Carolina.

But perhaps the most important of plant breeding has been in cotton. After study of the habits of the plant and working out methods of breeding, experiments were begun in 1899 in hybridizing sea-island cotton with standard short-staple varieties, and in selection of promising short-staple kinds with a view of securing greater length of staple in combination with productiveness and qualities desirable in ginning and manufacture. Also experiments for the production of early weevil-resisting and wilt-resisting kinds have met with encouraging success.

**Soil study.**—The fertility of the soil has long been recognized as of first importance in farming, but only eight years ago a careful study of the various soils of the country began. Certain areas have now been examined and mapped in nearly every State and a very large amount of information gathered indicating the nature of the soils and classifying them, and also showing their present uses and products. The facts thus ascertained have been widely scattered through the publications of the Bureau of Soils, and in some cases have led to the introduction of valuable new methods and management for crops, notably of tobacco in parts of North Carolina, Florida, Alabama, Texas, Ohio, and Wisconsin, and rice in South Carolina, Mississippi, Louisiana, and Texas.

Special studies were made of soils adapted to particular crops and uses. Among these were apple, grape, citrus-fruit, sugar-beet, alfalfa, rice, sugar-cane, corn, grass, oats, buckwheat, trucking, and tobacco lands. The study of cotton soils showed that the problems in the lands now devoted to this crop are how to meet the inundations in the lowlands and at the same time keep the renewal of fertility accompanying, and how in the uplands to prevent erosion and retain fertility by rotation of crops and other means.

Alkali soils and the effect on them of irrigation were studied beginning in 1902, and reclamation by underdrainage and by use of alkali-resistant plants was proposed. Experiments in this direction were undertaken in several States, including Montana, Washington, California, and Utah, and success in them assured.

The study of soil physics developed the relation of productiveness to the mechanical condition of the ground, and the importance of proper drainage and tillage as related to crop rotation and fertilization was recognized and studied.

An expeditious method of testing the fertilizer requirements of a soil was devised and in practice was found to work satisfactorily.

**Tobacco investigations.**—The study of tobacco-producing areas in the soils work suggested a consideration of how some of the high-priced foreign tobaccos, such as Sumatra and Cuban, might be produced in this country. An experiment was made in the tobacco region of the Connecticut Valley in growing Sumatra tobacco under canvas, and later the work was taken up on a large scale by private enterprise. Successful experiments were also made in growing Cuban and other fine tobaccos in several tobacco regions, and these are now in progress in Virginia, Ohio, Texas, and other States. A chemical study of tobacco was made in 1899 by which important improvements in the method of fermentation of tobacco in bulk were discovered, and this introduced better methods of handling in warehouse and factory.

Special attention was given by the Bureau of Plant Industry for two years to improvement of cultural methods, and to selection of seed and crossing of varieties with the view of developing types of a uniform high quality.

**Food inspection and study.**—Discussion of foods and their adulteration led to the establishment of two inspection services in the past six years. Butter is now subjected to a close watch and only a pure article can go on the market under that name. Oleomargarine and renovated butter must be sold as such, and a corps of inspectors in the Bureau of Animal Industry is expected to guarantee that result. Along with this the Bureau of Chemistry, in cooperation with the Treasury Department, undertakes to inspect importations and exportations of foods to maintain their purity and genuineness. The same Bureau in 1902 began the investigation into the effect of preservatives on foods. This was a natural outgrowth of the examination of preserved meats for the War Department in connection with the Spanish American war. The first study was of borax and boracic acid. An experimental table was maintained for many months and the effect of carefully weighed quantities of borax mixed with the food was scientifically noted. A large amount of data was thus obtained and the results made conclusive and published as a guide for health authorities in dealing with the use of boracic preservatives.

Nutrition investigations to determine the food values of different substances ordinarily used and to gain a more intimate knowledge of the digestive and metabolic action of the vital forces of the human system in relation to foods have been continued.

**Market and storage.**—Experimental shipments of various commodities have been made to determine how farm products can be best marketed abroad. Early among these were shipments of butter to London; and these with the exhibit at the Paris Exposition in 1900

showed that no nation is more skillful in bringing butter and other dairy products to the consumer fresh and in attractive form. Apples, peaches, and other fruits were sent in experimental shipments, and better markets secured in England and France. By this means a way has been provided to relieve any glut of the American markets with these fruits.

Fruit losses in cold storage and in transport are minimized as a result of facts determined in the Department. Better methods of growing and handling fruit were found out and a beginning at least made in their use. The saving that will eventually follow will alone many times repay the expense of the investigation of domestic handling of fruit; and the safe marketing of pears and apples abroad in time of a large surplus here promises almost an equal advantage.

**Forest development and management.**—A change in the methods of the forestry work was made soon after the service was reorganized under Mr. Wilson's administration, with the purpose of making it more directly useful to owners of forest lands both in small lots and in large areas. Plans for cooperation with both classes of owners in managing forest lands were formed and were promptly accepted both by farmers and lumber companies generally. As a result improved methods of wood-lot and forest management have come into use in nearly every State in the Union. At the same time the scientific study of trees and improved methods of forest planting have received attention, along with experiments in timber preservation and tests of the strength and value of different woods. The high character of this work won recognition, and within the past year the management of the national forests, including millions of acres of forest reserves, have been placed in the hands of this Bureau, now known as the Forest Service. This practical forest management has saved millions of the wealth of the nation and of private citizens.

**Agricultural education and farmers' institutes.**—Advances were made in general agricultural education by school garden work and by prize competition between boys' clubs in the growing of corn and other crops. Gardening in connection with city schools became very popular and familiarized thousand of city children with the processes of plant life and gave them some idea of the cultivation of crops on the farm. The organization of boys' clubs on the farms in several States aroused an interest in the selection of superior seed and the adoption of improved processes of cultivation.

Practical and direct relations were established in 1903 with farmers' institutes throughout the country by the appointment of a special agent of the Office of Experiment Stations to cooperate with the State and county officials interested in this line of agricultural education.

An unexpected result of the investigation of the cotton-boll weevil has been the establishment of experimental farms in the cotton region and a consequent wide introduction of improved and diversified farming.

**Weather study and forecasting.**—Instruments and apparatus for recording weather data were improved and standardized, and climatic statistics gathered, compared, and used in making forecasts, then put in form for future use. The number of stations was increased, including points on the Caribbean Sea and the Gulf of Mexico, in Bermuda, the Bahamas, and the Azores, until the real direction of important progress has changed from practical extension of this kind to a study of scientific problems, such as the study of the movements of the atmosphere at much higher altitudes than heretofore commonly reached. For this purpose the establishment of a great national observatory for weather study has been begun at Mount Weather, Virginia, a suitable point in the Blue Ridge Mountains, 50 miles from Washington.

The study of wireless telegraphy was taken up soon after successful transmission of messages without wires was achieved; but this branch was turned over to the Navy Department, and the meteorological observations of that Department were taken in exchange.

The watching of storms and floods was continued and efforts were made to render more efficient service to seafaring interests and to farmers and business men in overflowed districts. It has been impossible of course to prevent losses by floods, ice gorges, and hurricanes, but the known saving effected has repaid several times over the cost of the entire weather service.

Crop reporting has been continued and improved and the issue of frost warnings extended.

**Game protection and study of birds and mammals.**—The passage of bills by Congress in 1900 and subsequently for the regulation of the importation and killing and sale of birds and animals led to the establishment of a service in the Biological Survey for the enforcement of these laws. Through its efforts the public was made familiar with the Federal laws, also with the State laws on hunting, the importation of harmful species of animals was reduced to almost nothing, and the useful species, especially game, were protected from indiscriminate slaughter and probable extinction. Along with this the Biological Survey continued its study of animals to determine their relation as useful or harmful to the farmer, and its determination of life zones and crop zones in the United States.

**Prices of farm products.**—The function of the statistical service of the Department was clearly defined as the rendering of assistance to the farmer in receiving a fair price on his products. The reporting of crop prospects was improved and the spread of the



information when gathered, studied, and printed was made more effective, especially by a system of posting card announcements of results in the 92,000 post-offices of the country.

The study of foreign markets was continued, and reports of our trade relations with important nations, based on a study and analysis of Treasury reports of exports and imports, were published.

The Crop Reporter, an eight-page quarto monthly paper, was established in 1899 as a means of communication between the Bureau and its thousands of correspondents. A special agent was maintained in London chiefly for the purpose of reporting European crop conditions and prospects to this paper.

**Control of disease and crop pests.**—A large share of the attention of the Bureaus of Animal and Plant Industry and of the Bureau of Entomology was devoted to the suppression of diseases of animals and plants and the extermination of insects harmful in the several fields of agricultural activity. No other pest approached the cotton-boll weevil in the damage done and in the amount of time and money spent in seeking means of control. The cotton-boll worm also occasioned notable loss, as did corn worms, the Hessian fly, tobacco worms and many other well-known insects and insect larvæ; and in these cases measures adopted for control were found useful. The same is true of the Texas-fever ticks, sheep and cattle scab mites, and other insects injurious to animals. Investigations continue, however, and the measure of success attained in the case of sheep scab encourages a hope that in time these losses may be prevented. Scale insects were studied and remedies provided for their control; so also forestry insects, while a large share was taken in the study of insects that spread human diseases.

The prompt and complete suppression of an outbreak of foot-and-mouth disease in New England in 1902-3 commanded general commendation and also showed that such diseases and pests may be successfully combated. The manner in which the result was brought about proved that American farmers are coming to recognize the necessity of radical measures, even when accompanied by considerable immediate loss, in meeting such an emergency as an epidemic among live stock. The Bureau of Animal Industry was able to wipe out the foot-and-mouth-disease contagion only by the ready and intelligent cooperation of owners of diseased cattle. The expense incurred was only about half the amount appropriated by Congress for the purpose.

**Publication and distribution of information for farmers.**—The editing, illustration, and publication of results reached by the several branches of the service grew with the extension of the Department's activities. No effort has been spared to present facts of practical value in actual farming in terms perfectly plain to farmers

of every position in life, so that all may receive the benefits paid for by all. At the same time statements of progress in scientific research were issued in technical language in limited number for the benefit of persons associated more or less directly with Department scientists in their investigations. The illustration of these books was directed to making clear the statements of the text. The Yearbook series of the Department, which had recently been started when Mr. Wilson came into office, was continued and improved. It has received the commendation of American farmers and farm journals as well as European authorities.

The distribution of Department publications to farmers constituted an important feature in connection with their publication. Press notices, lists of new and of all available publications were issued to keep the people informed as to what information and aid could be obtained. At the same time methods of keeping record of where valuable books have been sent as well as of inquiry as to where they are needed were combined to secure the greatest usefulness of these books to the farming world.

The demand for these publications has so far exceeded the supply that it has been necessary practically to do away with all free distribution, except to persons who contribute by service rendered to the Department work. Sales of them have increased notably in recent years.

Special efforts by indexing were made to keep easily in reach of farmers and students such information as has been secured by the Department.

**Expositions.**—The several important expositions of the past eight years received due consideration. The Department has been fitly represented at Nashville, at Omaha, at Buffalo, at Paris, at St. Louis, and at Portland. What is being done for the farmer and farming was put before the world and had a wide influence in increasing the knowledge of the American public as to their opportunities for informing themselves regarding progressive farming and in the same degree as the spread of this knowledge was accomplished the usefulness of the Department was increased.

**Work in new territory.**—The discovery of gold in Alaska and the addition of the several island possessions to the United States in 1897-98 presented new fields for Department operations, and they were promptly occupied. Explorations and preliminary surveys were made with the purpose of determining the agricultural products and possibilities of all, and experts were set to work to introduce new methods, to improve old methods of work, and to find where new crops and industries could be established. Tropical and subtropical crops were carefully studied, and the problem of live-stock production was investigated. Experiment stations were established in Alaska,

Hawaii, and Porto Rico, and aid was given in the organization of a department of agriculture in the Philippines.

**Study in the Department.**—The library of the Department affords a means for the study by persons fitted for independent investigation of what has already been done in the leading agricultural problems that is hardly equaled anywhere else in the world. Its growth has been steady and well regulated. In 1897 there were 58,000 volumes; in 1905 the number had grown to 81,000.

The need of specially trained assistants in the Department work and the existence of unusual opportunities for study joined to make practicable a system of admission of young men and women into certain branches of Department work at low salaries with the purpose of continuing their studies along their chosen lines. From these student assistants the Department has selected a number of capable officials, whose service has justified the establishment of the system.

#### THE DEPARTMENT BUILDINGS AND GROUNDS.

With the establishment of a new department of Government in 1862 it was expected that separate offices would be provided, but this was not done till six years later. Reservation 2, at Washington, D. C., a square of ground between Twelfth and Fourteenth streets SW., B street SW., and the canal (B street NW.), containing about 40 acres, was given to Commissioner Newton as an experimental farm. The ground was broken, a supply of water was carried from the city waterworks, and considerable planting was done, but there was little building during his time.

**The first Department building.**—In 1867 Congress appropriated \$100,000 for the erection on the reservation of an office building for the Department. The contract was let to Francis Gibbons, jr., of Baltimore, and on September 1, 1868, the house was ready for occupancy. The frontispiece of this bulletin shows this building. About the same time houses for use in the propagation of plants for distribution were erected, along with conservatories, and a grapery for tests of foreign grapes. The total cost of these buildings was \$140,000.

Afterwards some additions were made, but nothing considerable was done till after the Atlanta Exposition in 1880. The Centennial Exposition at Philadelphia added a large amount of material to the Department museum, but it was thought sufficient to provide space for this by putting up a gallery around the large room on the second floor of the main building. This was then occupied by the museum, as it is now by the library. But after the Atlanta Exposition other additions to the museum were made, and it was then found necessary to have more room. Accordingly \$10,000 was appropriated in 1881

for the construction of a building for its use. The bill called it a "building for display of agricultural implements." It was intended by Commissioner Le Duc that this should be of brick, and it was to be located some distance north of the southeast corner of the reservation. Excavations for the foundation were dug on this proposed site, but Mr. Le Duc was succeeded by Commissioner Loring and the plans were changed. The extreme southeast corner of the grounds was chosen, and the frame structure long used as a museum and for offices for several divisions of the Department was erected.

**Erection of smaller structures.**—Immediately after this an appropriation of \$25,000 for a building for the storage and distribution of seeds was made, and the brick structure just southeast of the main building was put up. It was occupied by the Seeds Division on the first floor and the Division of Statistics on the second; but when, under Secretary Morton, the distribution of seed was taken away from Washington, the lower story of the building was given to the Divisions of Entomology and Biological Survey. In 1879 an appropriation of \$1,500 was made for the building of the stable and in 1883 \$2,500 for an additional greenhouse. In 1897 provision was made for the erection of a fireproof building at a cost not to exceed \$3,000. This was put up near the south entrance to the grounds at a cost of \$1,650.66. It furnished safe storage for important books and records. The majority of the other structures on the ground were built by the carpenter, Mr. Halley, from the Department contingent fund. In all not more than \$210,000 appears to have been expended for the Department buildings up to the beginning of Secretary Wilson's administration.

**Weather Bureau buildings.**—The buildings for the Weather Bureau at Twenty-fourth and M streets NW. were purchased, along with the site, in 1888 for \$112,000. The service was then still in the War Department. Additions were made to adapt the place for its use at a cost of \$38,000. The grounds contain 54,000 square feet.

The buildings occupied by Weather Bureau stations at several points are owned by the Department, and several of the more important have been erected in recent years. In 1903 it was determined to establish a meteorological observatory similar to the great institutions maintained by the leading nations of the world, and a high point on the Blue Ridge Mountains in Virginia, about 50 miles from Washington, was chosen as the site. The place was called Mount Weather and is the highest elevation within easy reach of the Capital. Its elevation is 1,800 feet. The erection of suitable buildings was begun promptly in 1903, and as soon as one was completed it was equipped and scientific work was commenced. Already buildings which cost \$150,000 have been erected and equipped, and construction and equipment are still steadily progressing.

**New Department building.**—The buildings occupied by the Department were found to be constantly more inadequate as the work grew rapidly in many directions, and the number and cost of rented buildings greatly increased. In 1901 an appropriation of \$5,000 was made for the selection of architect and plans for a new building. Under the direction of the Supervising Architect, Treasury Department, a commission, consisting of Messrs. D. H. Burnham, C. F. McKim, Augustus St. Gaudens, F. L. Olmsted, jr., and James K. Taylor, was named to pass upon architects and drawings.

On February 9, 1903, Congress appropriated \$1,500,000 for the new building and made \$250,000 available for the commencement of work. In September, 1903, Rankin, Kellogg & Crane, of Philadelphia, were selected as architects and a contract for plans and specifications was made with them. At that time the Department was occupying about 3 acres of floor space, over half of which was rented. A building committee, consisting of B. T. Galloway, D. E. Salmon, and A. C. True, was appointed to supervise the work on behalf of the Secretary. They worked out a scheme for a series of buildings, ten in all, as originally planned, connected by pavilions and constructed so as to make a harmonious whole. Nine of these were to be laboratory buildings, grouped about a central structure designed for administrative uses. The two principal laboratory buildings are now in course of construction and it is expected that they will be completed within the contract time, November 14, 1907.

**Experimental grounds and Arlington farm.**—The reservation at Twelfth and B streets SW. continued to be used as an experimental garden till after the erection of the Department buildings. It was then agreed that for anything in the way of an experimental farm a much larger tract ought to be provided, and that Mr. Saunders, then the Department horticulturist, should be directed to lay out and improve the grounds as an arboretum, to contain all the trees and shrubs which will grow without protection in this climate. They were to be grouped according to their families. The old canal was still in existence in front of the grounds and had to be filled. At the same time Mr. Saunders was converting the swampy reaches of the reservation into the present handsomely rolling grounds, covered with fine trees and surmounted at the front of the building by a terrace, with a beautiful display of flowers. The work of filling the canal and laying out and beautifying the grounds was completed in 1871.

The rich lands lying on an island in the Potomac opposite Washington, known as the Potomac Flats, were turned over to the Department in 1898 for use in seed testing and experiments with crops. A number of tests were made there and some unusual results in crop production were secured. But soon after the Bureau of Plant Industry was organized the part of the Arlington estate in Virginia, border-

ing immediately on the river, about 300 acres, was given to the Secretary by act of Congress to be used as an experiment farm, and an appropriation of \$10,000 was made in the bill of 1901 to provide for its maintenance. This farm is under the control of the Bureau of Plant Industry, but space is allowed to other branches of the Department whenever they have farming experiments to make. The land was originally barren but it is being brought up to a high state of fertility and cultivation.

#### **COST OF THE DEPARTMENT; ITS VALUE TO THE COUNTRY.**

The Department of Agriculture up to May 1, 1906, cost the people of the United States, **all told, \$60,110,836. This is much less than \$1,500,000 a year.** The question naturally presents itself: In what manner and to what extent has it made a return for this outlay? For in this respect does the Department of Agriculture differ from all the other departments of the Government; namely, that its services are more susceptible of being measured in actual money value. Its duties are not confined to the collection of taxes nor to police protection; it spreads information by which the people are better able to pay taxes and to protect their property and increase its value. About the time the work of the Department began it was necessary to import considerable quantities of agricultural products. This was partly due to bad crop seasons, but partly also to careless and ignorant methods of culture. Fertilizers were little known, barnyard manure was still regarded in many places as a nuisance to be got rid of, and rotation of crops was little practiced. Planting according to the phases of the moon was still in vogue in some sections.

**Increase in cereals.**—The production of corn and wheat, shown by the census, affords some proof of the increasing effectiveness of cultivation and, by just inference, of the assistance given by the Department. In 1839 the production of corn was 23 bushels for each person in the United States; in 1859 it was 27 bushels; in 1899, 34 bushels. This does not of course show with certainty that there was a corresponding increase in the production for each acre cultivated, but a comparison of the crop of 1879 with that of 1889 justifies that inference. In 1879 there were 35 bushels of corn raised for every person in the country, in 1889 only 34 bushels, but the production per acre increased from 28.1 bushels in 1879 to 29.5 in 1889. It may be supposed that a similar increase in product per acre would be found for the other decades if a record of the acreage planted had been made.

The comparison of the production of wheat gives a similar result. The quantity raised for each person in 1839 was 5.3 bushels; in 1890 it was 7.4.

**Other manifest gains.**—Through its Division of Statistics the Depart-

ment seeks to place in the hands of farmers such information as will enable them to estimate wisely the value of their crops and avoid deception and loss from speculative information spread abroad in the interest of buyers. Through the Bureau of Animal Industry it not only seeks to discover the causes and remedies of animal diseases, but also to maintain measures of control and prevention that will hinder the spread of contagion. Further, the diseases of plants are the subject of study of one division, and injurious insects receive the special attention of another. Also, the introduction of new and valuable economic plants has been a most important feature of Department work, and many improved varieties have resulted from its efforts.

Now, while it is manifestly impossible to express the results of all this work exactly in money returns, yet it is quite possible to do so in some cases, and in others to assure ourselves that they are too far-reaching and too great to be easily made the subject of exact reckoning. For instance, no one can venture upon an accurate estimate of the money saved to the country by the suppression and utter eradication of contagious pleuro-pneumonia by the Bureau of Animal Industry, nor of the value of the inspection of animals and meats by which European markets are kept open to these products; yet, as has already been stated, our actual saving, as the result of vessel inspection, is shown very closely by the reduction of the rate of insurance on export animals, which averages in the aggregate over \$2,100,000 yearly. In like manner the money returns of the increased yield of sugar per ton of cane, secured through the Division of Chemistry, can be shown by actual calculation, but no one can estimate the value of the introduction of the beet-sugar industry and its gradual extension until the entire consumption of sugar in this country shall be met by a home supply. Still no one doubts, who knows anything about the subject, that any one of the services mentioned will return to the Government in actual money value many times over what the entire cost of the Department has been. Many instances have been supplied of carefully estimated savings effected by the remedies or prevention secured as a result of investigation by the Department both in the case of injurious insects and of plant diseases, but in the main the gains thus effected are quite beyond calculation.

Who, for instance, can estimate the value of the rescue from annihilation of the California orange industry through the introduction of the Australian parasite of the scale insect which was devastating the citrus orchards in that State? Equally beyond accurate estimate is the value of the introduction of the Bahia or navel orange by the former horticulturist of the Department, Mr. William Saunders.

Specific examples of money saved through the warnings of the Weather Bureau are numerous and easily established. In 1894 the

Weather Bureau, by its warnings, saved from the rocks, at the entrance of Chesapeake Bay, the ship *Rappahannock*, with a cargo worth over \$600,000. Furthermore, it is estimated that in the fall of that year 2,305 vessels, valued at \$36,283,913, but for the Weather Bureau warnings would have put to sea in approaching storms and heavy losses would have followed.

Frequently throughout the year minor savings, through the services of this Bureau, are reported from all sections of the country, aggregating a sum far in excess of its annual expenditures.

The discovery by the Division of Forestry of the real value of pine-tree timber, after the trees had been boxed for turpentine, has been estimated by reliable authorities as worth not less than \$2,000,000 to the Southern States.

**Secretary Rusk's estimate.**—Instances of the money value of services actually rendered by the Department might be enumerated indefinitely. Ample and sufficient grounds exist for the confidence that the new work undertaken from year to year will result in valuable returns in the future similar to those instanced. One-tenth has not been told, but enough has been said, without touching at all on the work of many of the divisions of the Department, to justify to the most skeptical the statement of a former Secretary, the Hon. J. M. Rusk, who, in his annual report for 1891, said:

In concluding the review of the work done under the several divisions of this Department since the date of my last annual report, it gives me pleasure to state, and I say this advisedly, that each one of more than a dozen divisions whose work I have reviewed has returned in actual value to the country during the past year far more than the entire annual appropriation accorded to this Department.



## BUREAUS, DIVISIONS, AND OFFICES.

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### OFFICE OF THE SECRETARY.

The Office of the Secretary includes the Assistant Secretary, the Chief Clerk, the Solicitor, the Appointment Clerk, and the Chief of the Supply Division.

The Secretary is charged with the supervision of all public business relating to the agricultural industry. He makes such regulations for interstate traffic in live stock as may be necessary to prevent transmission of contagious diseases, and has charge of all interstate quarantine. He directs the admission or exclusion of live animals from foreign countries, and has charge of quarantine stations for importing cattle. He conducts the inspection and regulates the conditions of shipment of live stock and of meat products in interstate trade and for export. He is also charged with the execution of the pure food law. He exercises advisory supervision over the agricultural experiment stations deriving support from the National Treasury.

The Assistant Secretary performs such duties as may be required by law or prescribed by the Secretary. He also becomes Acting Secretary of Agriculture in the absence of the Secretary.

The Chief Clerk has the general supervision of clerks and employees; is charged with the enforcement of Department regulations, and is superintendent of the buildings.

The Solicitor is the legal adviser of the Secretary, and is charged with the preparation of all legal papers and the supervision of all legal business of the Department.

The Appointment Clerk prepares all papers involved in making appointments, transfers, etc., decides civil-service questions, has charge of correspondence with the Civil Service Commission, and keeps the personal records.

The Supply Division has charge of purchases of supplies and materials paid for from the general funds of the Department.

### WEATHER BUREAU.

The Weather Bureau had its origin in the collection and publication of meteorological data by the Smithsonian Institution and several Departments, beginning early in the nineteenth century. The recommendation by Commissioner Newton that daily weather reports by telegraph, under the direction of the Government, be distributed to the country was made in 1864; and this service was authorized by an act

of Congress of February 4, 1870, and was conducted by the Chief Signal Officer of the Army for twenty years. By the act<sup>a</sup> of October 1, 1890, the Weather Bureau as such was officially recognized, and was transferred to the Department of Agriculture, the general details of its organization being defined in that act. On July 1, 1891, the actual transfer took place.

The Bureau now has 164 fully equipped meteorological stations for weather observation, many of which issue local forecasts, 308 stations specially equipped for the display of danger warnings to mariners, 286 stations for the taking of telegraphic reports of temperature and rainfall in the growing fields, 423 river gaging stations, 107 special river rainfall stations, and over 3,600 stations where voluntary observers make records of temperature and rainfall with standard instruments. Mark W. Harrington was the first chief, and was succeeded on July 1, 1895, by Willis L. Moore, the present chief.

#### **BUREAU OF ANIMAL INDUSTRY.**

The Bureau of Animal Industry had its origin in investigations of diseases of domestic animals. The first appropriation for this purpose, \$10,000, was made in 1878, and the Bureau was established in 1884. Dr. D. E. Salmon, whose vigorous policy of killing all suspected animals led to the suppression of pleuro-pneumonia, was made chief. He held the position till 1905, when he was succeeded by Dr. A. D. Melvin, the present head of the Bureau.

This Bureau now comprises separate branches of work as follows: Inspection, Quarantine, Pathology, Biochemic, Dairy, Zoology, Experiment Station, Editorial, and Animal Husbandry. It makes investigations as to the existence of dangerous communicable diseases of live stock, superintends the measures for their control and extirpation, makes original investigations as to the nature and prevention of such diseases, and reports on the condition and the means of improving the animal industries of the country. It also has charge of the inspection of import and export animals, of the inspection of vessels for the transportation of export cattle, and of the quarantine stations for imported neat cattle, supervises the interstate movement of cattle, and inspects live stock and their products when offered for food consumption; has supervision of manufacture, interstate commerce, and export of renovated butter.

#### **BUREAU OF PLANT INDUSTRY.**

The Bureau of Plant Industry was formed in 1901 by the Secretary, who brought the work of the Divisions of Agrostology, Botany, Gardens and Grounds, Pomology, and Vegetable Physiology and Pathology under one control, with B. T. Galloway in charge. This

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<sup>a</sup> See page 61 for text.

step was partly due to the death, in the fall of the previous year, of William Saunders, whose work as horticulturist was at once turned over to Professor Galloway.

A brief notice of the branches thus consolidated is proper in this place. The Division of Gardens and Grounds originated in the propagating garden, which was started in 1858 while the whole agricultural service of the Government was a section of the Patent Office, in the Department of the Interior. Mr. Saunders, just mentioned, was put in charge in July, 1864, and conducted the work, including the care of the Department grounds and the propagation and distribution of rare and useful plants, till his death, a period of over thirty-eight years. The Division of Botany was established in March, 1869, with C. C. Parry as chief, who was succeeded by Dr. George Vasey. Frederick V. Coville, who continues in charge of the work as a branch of the Bureau of Plant Industry, was appointed chief on March 9, 1893. This Division maintained the United States National Herbarium until July, 1896, when it was turned over to the Smithsonian Institution, still remaining, however, in charge of the Department Botanist. The Division of Pomology was established in 1886 with H. E. Van Deman as chief, who was succeeded by S. B. Heiges. After Mr. Heiges's resignation in 1897, Mr. W. A. Taylor was in charge till the appointment of G. B. Brackett, on August 1, 1897. He still conducts the work as a branch of the Bureau of Plant Industry. The Division of Vegetable Physiology and Pathology originated in 1886 as the section of mycology, in the Division of Botany, in charge of F. Lamson-Scribner, changed in name the next year to the section of vegetable pathology. In 1891 it became a separate division with B. T. Galloway as chief from November 1, 1888, till his appointment as Chief of the Bureau of Plant Industry, when the work passed to the hands of his assistant, A. F. Woods, who is still in charge. The Division of Agrostology was established July 1, 1895, with F. Lamson-Scribner as chief and continued under his control as part of the Bureau until 1901, when he was succeeded by W. J. Spillman, who continues in charge under the title of Agriculturist in charge of Farm Management Investigations.

The establishment of the Bureau by the Secretary was confirmed by Congress in the agricultural appropriations bill of 1901, and Doctor Galloway has continued in charge as chief till the present time.

The Bureau of Plant Industry studies plant life in all its relations to agriculture. Its work is classified under the general subjects of Pathological Investigations, Physiological Investigations, Taxonomic Investigations, Agronomic Investigations, Horticultural Investigations, and Seed and Plant Introduction Investigations.

**FOREST SERVICE.**

The Bureau of Forestry was organized from the Division of Forestry by authority of the appropriations act approved March 2, 1901, with Gifford Pinchot as chief. The Division of Forestry was established by the Commissioner in 1877, and reorganized under act of Congress in 1886. N. H. Egleston was the first chief, and was succeeded by B. E. Fernow, who resigned in 1898, and was succeeded by Professor Pinchot. In 1905 the name was changed to the Forest Service, and work greatly extended by the transfer to it from the General Land Office of the management of the national forest reserves, with authority to establish a large corps of wardens, inspectors, etc., to conserve this important national asset.

The Forest Service has charge of the administration of the national forest reserves, and conducts examinations on the public lands to determine the propriety of making changes in the boundaries of existing national forest reserves and of withdrawing other areas suitable for new reserves; gives practical assistance in the conservative handling of State and private forest lands; investigates methods of planting and kinds of trees for planting, and gives practical assistance to tree planters; studies commercially valuable trees to determine the best means of using and reproducing them; tests the strength and durability of construction timbers, railroad ties, and poles, and determines the best methods of extending their life through preservative treatment; and studies forest fires, the effects of grazing on forest land, turpentine orcharding, and other forest problems.

**BUREAU OF CHEMISTRY.**

The Division of Chemistry was established in 1862, and chiefs were in succession C. M. Wetherill, Henry Erni, Thomas Antisell, R. T. Brown, William McMurtrie, and Peter Collier, who was succeeded by Harvey W. Wiley, appointed on April 9, 1883. In the appropriation bill of March 2, 1901, the bureau organization was provided for and Dr. Wiley has continued in office as Chief of the Bureau till the present time. A large expansion of this work began with the incorporation in the agricultural appropriation bill approved March 1, 1899, of a paragraph providing for the inspection by the Secretary of Agriculture, with the aid of the Secretary of Treasury, of imported food products to determine their wholesomeness.

The Bureau of Chemistry investigates methods proposed for the analysis of plants, fertilizers, and agricultural products, and makes such analyses as pertain in general to the interests of agriculture. The work on foods includes the analysis of adulterated products, experiments to determine the effect of adulterants on the human

organism, and the investigation of food products imported into the United States. The Bureau does chemical work for some of the other Bureaus and Divisions of the Department, and for other Departments of the Government which apply to the Secretary of Agriculture for such assistance.

#### **BUREAU OF SOILS.**

The Division of Soils, formerly a branch of the Weather Bureau, was established as an independent division of the Department in 1894, with Milton Whitney as chief. The Bureau organization was effected under the appropriation bill of March 1, 1901, and Professor Whitney has continued in control of the work to the present time. A general survey of the soils of the United States by field agents of the Bureau was begun in 1900, and has extended to nearly every State.

The Bureau of Soils is intrusted with the investigation, survey, and mapping of soils; the investigation of the cause and prevention of the rise of alkali in the soil, and the drainage of soils; and the investigation of the methods of growing, curing, and fermentation of tobacco in the different tobacco districts.

#### **BUREAU OF ENTOMOLOGY.**

The Division of Entomology was established in 1863, and Townend Glover was the first chief. He was succeeded in turn by C. V. Riley, J. K. Comstock, C. V. Riley, and L. O. Howard, the present chief, who was appointed in 1894. The Bureau organization was effected under the agricultural appropriation act approved April 23, 1904.

The Bureau of Entomology obtains and disseminates information regarding injurious insects affecting field crops, fruits, small fruits, and truck crops, forests and forest products, and stored products; studies insects in relation to diseases of man and other animals and as animal parasites; experiments with the introduction of beneficial insects and with the fungous and other diseases of insects; and conducts experiments and tests with insecticides and insecticide machinery. It is further charged with investigations in apiculture and sericulture. The information gained is disseminated in the form of general reports, bulletins, and circulars. A good deal of museum work is done in connection with the Division of Insects of the National Museum, and insects are identified for experiment stations and other public institutions and for private individuals.

#### **BUREAU OF STATISTICS.**

Almost the earliest direct service of the Government for farmers was the collection and publication of agricultural statistics, and in 1863, soon after the Department obtained an independent position.

the Division of Statistics was established, but it was not until 1904 that a bureau organization was provided for by Congress. The chiefs have been in order Lewis Bollman, J. R. Dodge, Charles Worthington, J. R. Dodge, reappointed. Henry A. Robinson, and John Hyde. After the resignation of Mr. Hyde in 1905 the work was in charge of the Assistant Secretary, W. M. Hays, until the appointment on June 16, 1906, of Victor H. Olmsted, the present Statistician.

The Statistician collects information as to the condition, production, etc., of the principal crops, and the status of farm animals through State agents, each of whom is assisted by a corps of local reporters, through separate corps of county, township, and cotton correspondents, through traveling agents, and through a special foreign correspondent, assisted by consular, agricultural, and commercial authorities. He records, tabulates, and coordinates statistics of agricultural production, distribution, and consumption, the authorized data of governments, institutes, societies, boards of trade, and individual experts; prepares special statistical bulletins upon domestic and foreign agricultural subjects; and issues a monthly crop report for the information of producers and consumers. Special bulletins are published giving information of domestic and foreign trade and of the conditions under which foreign trade may be extended. Investigations are made of land tenures, country life, education, transportation, and other lines of rural economics.

#### **BUREAU OF BIOLOGICAL SURVEY.**

The Division of Ornithology and Mammalogy was established on July 1, 1886, with C. Hart Merriam as chief. On July 1, 1896, the name was changed to Biological Survey, and on July 1, 1905, a bureau was formed under the act approved on March 3, 1905. C. Hart Merriam has been chief of the service from the beginning.

The Bureau of Biological Survey studies the geographic distribution of animals and plants, and maps the natural life zones of the country; it also investigates the economic relations of birds and mammals, and recommends measures for the preservation of beneficial and the destruction of injurious species. It is charged with carrying into effect the provisions of the Federal law for the importation and protection of birds and certain provisions of the law for the protection of game in Alaska.

#### **DIVISION OF PUBLICATIONS.**

The Division of Publications originated in 1889 as a section of the Division of Statistics, which had in the early days of the work been charged with the editing of the Department reports. In 1890

it was organized separately as the Division of Records and Editing. It became the Division of Publications in 1895. Geo. Wm. Hill, made Editor in 1889, has been chief of the Division from the beginning.

The Division of Publications exercises general supervision of the Department printing and illustrations; edits all publications of the Department (with the exception of those of the Weather Bureau), has charge of the printing and Farmers' Bulletin funds, and distributes all Department publications with the exception of those turned over by law to the Superintendent of Documents for sale at the price affixed by him; it issues, in the form of press notices, official information of interest to agriculturists, and distributes to agricultural publications and writers notices and synopses of Department publications, and has charge of all correspondence with the Government Printing Office.

#### **DIVISION OF ACCOUNTS AND DISBURSEMENTS.**

The Division of Accounts and Disbursements originated as a branch of the Secretary's office. It was made a separate division in 1889. B. F. Fuller, the first chief, was succeeded by Frank L. Evans on July 13, 1893. A. Zappone, the present chief, succeeded Mr. Evans on May 1, 1906.

The Division of Accounts and Disbursements audits, adjusts, and pays all accounts and claims against the Department; decides questions involving the expenditure of public funds; prepares advertisements, schedules, contracts for annual supplies, leases, agreements, bonds, and letters of authority; writes, for the signature of the Secretary, all letters to the Treasury Department pertaining to fiscal matters and all letters to the Department of Justice; attends to litigation in which the Department is interested; issues requisitions for the purchase of supplies and requests for passenger and for freight transportation; prepares the annual estimates of appropriations; and transacts all other business relating to the financial interests of the Department.

#### **OFFICE OF EXPERIMENT STATIONS.**

The Office of Experiment Stations was established in 1888. The first director was W. O. Atwater, who was succeeded in 1891 by A. W. Harris. A. C. True, the present director, was appointed September 26, 1893, to succeed Mr. Harris.

The Office of Experiment Stations represents the Department in its relation to the experiment stations which are now in operation in all the States and Territories, and directly manages the experiment stations in Alaska, Porto Rico, and Hawaii. It seeks to promote the interests of agricultural education and investigation throughout the United States. It collects and disseminates general information

regarding agricultural schools, colleges, and stations, and publishes accounts of agricultural investigations at home and abroad. It also indicates lines of inquiry for the stations, aids in the conduct of cooperative experiments, reports upon their expenditures and work, and in general furnishes them with such advice and assistance as will best promote the purposes for which they were established. In a similar way it aids in the development of the farmers' institutes throughout the United States. It is charged with investigations on the nutritive value and economy of human foods. It conducts investigations of the laws and institutions relating to irrigation in different regions, the use of irrigation waters, the removal of seepage and surplus waters by drainage, and the use of different kinds of power and machinery for irrigation and other agricultural purposes.

#### OFFICE OF PUBLIC ROADS.

The Office of Public Roads was established in 1893, with Roy Stone as its first chief. There have been some minor variations in the title of the office, but the object of the work has remained the same. General Stone was succeeded as chief by Martin Dodge in 1900. The present chief, Logan Waller Page, was appointed in 1905.

The Office of Public Roads collects and disseminates information concerning systems of road management throughout the United States; conducts investigations and experiments regarding road-building materials and methods of road construction; makes chemical and physical tests of road materials and materials of construction relating to agriculture; gives expert advice on road administration and road construction, and demonstrates the best methods of construction; and prepares publications on these subjects.

#### LIBRARY.

The library of the Department was first officially recognized by the appointment of J. B. Russell as librarian in 1871. The collection of books had its origin in the transfer in 1869 of the works on agriculture from the library of the Patent Office. Additions have been made from time to time by exchange and purchase. The library now contains 92,000 volumes, and is undoubtedly the best separate collection on agriculture and allied subjects in the United States—probably the best in the world. It comprises complete sets of State agricultural publications and files of many of the agricultural journals from the beginning; a large collection of the official reports on agricultural subjects issued by foreign governments; important collections in botany, chemistry, horticulture, forestry, zoology, and entomology, particularly in their relations to agriculture; numerous sets of scientific serials; a well-selected collection of encyclopedias, atlases, and other general reference works, and a small collection of biography,



history, and general literature. A quarterly list of the additions to the library is published, and several lists of books on agricultural subjects have been issued. Succeeding Mr. Russell as librarian were Mrs. Ernestine H. Stevens, who served from November 1, 1877, and William Parker Cutter, who was appointed August 28, 1893. The present librarian, Miss Josephine A. Clark, was appointed on December 31, 1900, to succeed Mr. Cutter.

The librarian has charge of the library and supervises the arrangement and cataloguing of books, the preparation of bibliographies and similar publications, and the purchase of new books. The mailing lists for the distribution of Department publications to foreign countries are under the supervision of the librarian.



## LEGISLATION AND EXPENSES.

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### LAW CREATING THE DEPARTMENT OF AGRICULTURE.

The Department of Agriculture was established by an act of Congress approved by President Lincoln, May 15, 1862. The full text of the act is as follows:

AN ACT to establish a Department of Agriculture.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there is hereby established at the seat of the government of the United States a Department of Agriculture, the general designs and duties of which shall be to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants.

SEC. 2. *And be it further enacted,* That there shall be appointed by the President, by and with the advice and consent of the Senate, a "Commissioner of Agriculture," who shall be the Chief Executive officer of the Department of Agriculture, who shall hold his office by a tenure similar to that of other civil officers appointed by the President, and who shall receive for his compensation a salary of three thousand dollars per annum.

SEC. 3. *And be it further enacted,* That it shall be the duty of the Commissioner of Agriculture to acquire and preserve in his Department all information concerning agriculture which he can obtain by means of books and correspondence and by practical and scientific experiments (accurate records of which experiments shall be kept in his office), by the collection of statistics, and by any other appropriate means within his power; to collect, as he may be able, new and valuable seeds and plants; to test by cultivation the value of such of them as may require such tests; to propagate such as may be worthy of propagation, and to distribute them among agriculturists. He shall annually make a general report in writing of his acts to the President and to Congress, in which he may recommend the publication of papers forming parts of or accompanying his report, which report shall also contain an account of all moneys received and expended by him. He shall also make special reports on particular subjects whenever required to do so by the President or either House of Congress, or when he shall think the subject in his charge requires it. He shall receive and have charge of all the property of the agricultural division of the Patent Office in the Department of the Interior, including the fixtures and property of the propagating garden. He shall direct and superintend the expenditure of all money appropriated by Congress to the Department and render accounts thereof, and also of all money heretofore appropriated for agriculture and remaining unexpended. And said Commissioner may send and receive through the mails, free of charge, all communications and other matter pertaining to the business of his department, not exceeding in weight 32 ounces.

SEC. 4. *And be it further enacted,* That the Commissioner of Agriculture shall appoint a chief clerk, with a salary of two thousand dollars, who in all cases during the necessary

absence of the Commissioner, or when the said principal office shall become vacant, shall perform the duties of Commissioner, and he shall appoint such other employees as Congress may from time to time provide, with salaries corresponding to the salaries of similar officers in other departments of the Government; and he shall, as Congress may from time to time provide, employ other persons, for such time as their services may be needed, including chemists, botanists, entomologists, and other persons skilled in the natural sciences pertaining to agriculture. And the said Commissioner, and every other person to be appointed in the said Department, shall, before he enters upon the duties of his office or appointment, make oath or affirmation truly and faithfully to execute the trust committed to him. And the said Commissioner and the chief clerk shall also, before entering upon their duties, severally give bonds with sureties to the Treasurer of the United States, the former in the sum of ten thousand dollars and the latter in the sum of five thousand dollars, conditional to render a true and faithful account to him or his successor in office quarter-yearly accounts of all moneys which shall be by them received by virtue of the said office, with sureties to be approved as sufficient by the Solicitor of the Treasury; which bonds shall be filed in the office of the First Comptroller of the Treasury, to be by him put in suit upon any breach of the conditions thereof. (12 Stat. L., 387.)

#### CHANGE IN RANK OF THE DEPARTMENT.

The Department was made an Executive office of the first rank under the law approved by President Cleveland February 9, 1889. By that act the title of the head of the Department was changed from Commissioner to Secretary, and he became a member of the President's Cabinet.

AN ACT to enlarge the powers and duties of the Department of Agriculture and to create an Executive Department to be known as the Department of Agriculture.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Department of Agriculture be an Executive Department under the supervision and control of the Secretary of Agriculture, who shall be appointed by the President, by and with the advice and consent of the Senate; and section one hundred and fifty-eight of the Revised Statutes is hereby amended to include such Department, and the provisions of title four of the Revised Statutes, including all amendments thereto, are hereby made applicable to said Department.

SEC. 2. That there shall be in said Department an Assistant Secretary of Agriculture, to be appointed by the President, by and with the advice and consent of the Senate, who shall perform such duties as may be required by law or prescribed by the Secretary.

SEC. 3. That the Secretary of Agriculture shall receive the same salary as is paid to the Secretary of each of the Executive Departments and the salary of the Assistant Secretary of Agriculture shall be the same as that now paid to the First Assistant Secretary of the Department of the Interior.

SEC. 4. That all laws and parts of laws relating to the Department of Agriculture now in existence, as far as the same are applicable and not in conflict with this act, and only so far, are continued in full force and effect. (25 Stat. L., 659.)

Several other changes have been made in the law, including an amendment which repeals the requirement that the Commissioner (Secretary) and chief clerk give bond. Neither is now charged with any Government property or money.

## LAW CREATING THE BUREAU OF ANIMAL INDUSTRY.

The Bureau of Animal Industry was established as an integral branch of Department activity by a law approved on May 29, 1884. The text of that law is as follows:

AN ACT for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Commissioner of Agriculture shall organize in his department a Bureau of Animal Industry, and shall appoint a chief thereof, who shall be a competent veterinary surgeon, and whose duty it shall be to investigate and report upon the condition of the domestic animals of the United States, their protection and use, and also inquire into and report the causes of contagious, infectious, and communicable diseases among them, and the means for the prevention and cure of the same, and to collect such information on these subjects as shall be valuable to the agricultural and commercial interests of the country; and the Commissioner of Agriculture is hereby authorized to employ a force sufficient for this purpose, not to exceed twenty persons at any one time. The salary of the chief of said bureau shall be three thousand dollars per annum; and the Commissioner shall appoint a clerk for said bureau, with a salary of one thousand five hundred dollars per annum.

SEC. 2. That the Commissioner of Agriculture is authorized to appoint two competent agents, who shall be practical stock raisers or experienced business men familiar with questions pertaining to commercial transactions in live stock, whose duty it shall be, under the instructions of the Commissioner of Agriculture, to examine and report upon the best methods of treating, transporting, and caring for animals, and the means to be adopted for the suppression and extirpation of contagious pleuro-pneumonia, and to provide against the spread of other dangerous contagious, infectious, and communicable diseases. The compensation of said agents shall be at the rate of ten dollars per diem, with all necessary expenses, while engaged in the actual performance of their duties under this act when absent from their usual place of business or residence as such agent.

SEC. 3. That it shall be the duty of the Commissioner of Agriculture to prepare such rules and regulations as he may deem necessary for the speedy and effectual suppression and extirpation of said diseases, and to certify such rules and regulations to the executive authority of each State and Territory, and invite said authorities to cooperate in the execution and enforcement of this act. Whenever the plans and methods of the Commissioner of Agriculture shall be accepted by any State or Territory in which pleuro-pneumonia or other contagious, infectious, or communicable disease is declared to exist, or such State or Territory shall have adopted plans and methods for the suppression and extirpation of said diseases, and such plans and methods shall be accepted by the Commissioner of Agriculture, and whenever the governor of a State or other properly constituted authorities signify their readiness to cooperate for the extinction of any contagious, infectious, or communicable disease in conformity with the provisions of this act, the Commissioner of Agriculture is hereby authorized to expend so much of the money appropriated by this act as may be necessary in such investigations, and in such disinfection and quarantine measures as may be necessary to prevent the spread of the disease from one State or Territory into another.

SEC. 4. That in order to promote the exportation of live stock from the United States the Commissioner of Agriculture shall make special investigation as to the existence of pleuro-pneumonia, or any contagious, infectious, or communicable disease, along the dividing lines between the United States and foreign countries, and along the lines of transportation from all parts of the United States to ports from which live stock are exported, and

make report of the results of such investigation to the Secretary of the Treasury, who shall, from time to time, establish such regulations concerning the exportation and transportation of live stock as the results of said investigations may require.

SEC. 5. That to prevent the exportation from any port of the United States to any port in a foreign country, of live stock affected with any contagious, infectious, or communicable disease, and especially pleuro-pneumonia, the Secretary of the Treasury be, and he is hereby, authorized to take such steps and adopt such measures not inconsistent with the provisions of this act, as he may deem necessary.

SEC. 6. That no railroad company within the United States, or the owners or masters of any steam or sailing or other vessel or boat, shall receive for transportation or transport, from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any live stock affected with any contagious, infectious, or communicable disease, and especially the disease known as pleuro-pneumonia; nor shall any person, company, or corporation deliver for transportation to any railroad company, or master or owner of any boat or vessel, any live stock, knowing them to be affected with any contagious, infectious, or communicable disease; nor shall any person, company, or corporation drive on foot or transport in private conveyance from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any live stock, knowing them to be affected with any contagious, infectious, or communicable disease, and especially the disease known as pleuro-pneumonia: *Provided*, That the so-called splenic or Texas fever shall not be considered a contagious, infectious, or communicable disease within the meaning of sections four, five, six and seven of this act, as to cattle being transported by rail to market for slaughter, when the same are unloaded only to be fed and watered in lots on the way thereto.

SEC. 7. That it shall be the duty of the Commissioner of Agriculture to notify, in writing, the proper officials or agents of any railroad, steamboat, or other transportation company doing business in or through any infected locality, and by publication in such newspapers as he may select, of the existence of said contagion; and any person or persons operating any such railroad, or master or owner of any boat or vessel, or owner or custodian of or person having control over such cattle or other live stock within such infected district, who shall knowingly violate the provisions of section six of this act, shall be guilty of a misdemeanor, and, upon conviction, shall be punished by a fine of not less than one hundred nor more than five thousand dollars, or by imprisonment for not more than one year, or by both such fine and imprisonment.

SEC. 8. That whenever any contagious, infectious, or communicable disease affecting domestic animals, and especially the disease known as pleuro-pneumonia, shall be brought into or shall break out in the District of Columbia, it shall be the duty of the Commissioners of said District to take measures to suppress the same promptly and to prevent the same from spreading; and for this purpose the said Commissioners are hereby empowered to order and require that any premises, farm, or farms where such disease exists, or has existed, be put in quarantine; to order all or any animals coming into the District to be detained at any place or places for the purpose of inspection and examination; to prescribe regulations for and to require the destruction of animals affected with contagious, infectious, or communicable disease, and for the proper disposition of their hides and carcasses; to prescribe regulations for disinfection, and such other regulations as they may deem necessary to prevent infection or contagion being communicated, and shall report to the Commissioner of Agriculture whatever they may do in pursuance of the provisions of this section.

SEC. 9. That it shall be the duty of the several United States district attorneys to prosecute all violations of this act which shall be brought to their notice or knowledge by any person making the complaint under oath; and the same shall be heard before any district or circuit court of the United States or Territorial court holden within the district in which the violation of this act has been committed.

SEC. 10. That the sum of one hundred and fifty thousand dollars, to be immediately available, or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, to carry into effect the provisions of this act.

SEC. 11. That the Commissioner of Agriculture shall report annually to Congress, at the commencement of each session, a list of the names of all persons employed, an itemized statement of all expenditures under this act, and full particulars of the means adopted and carried into effect for the suppression of contagious, infectious, or communicable diseases among domestic animals. (23 Stat. L., 31.)

#### TRANSFER OF WEATHER BUREAU TO THE DEPARTMENT.

The Weather Bureau was transferred from the War Department to the Department of Agriculture under a law approved October 1, 1890. The principal sections of this law are given here.

AN ACT to increase the efficiency and reduce the expenses of the Signal Corps of the Army, and to transfer the weather service to the Department of Agriculture.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the civilian duties now performed by the Signal Corps of the Army shall hereafter devolve upon a bureau to be known as the Weather Bureau, which, on and after July first, eighteen hundred and ninety-one, shall be established in and attached to the Department of Agriculture, and the Signal Corps of the Army shall remain a part of the military establishment under the direction of the Secretary of War, and all estimates for its support shall be included with other estimates for the support of the military establishment.

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SEC. 3. That the Chief of the Weather Bureau, under the direction of the Secretary of Agriculture, on and after July first, eighteen hundred and ninety-one, shall have charge of the forecasting of weather, the issue of storm warnings, the display of weather and flood signals for the benefit of agriculture, commerce, and navigation, the gauging and reporting of rivers, the maintenance and operation of sea-coast telegraph lines and the collection and transmission of marine intelligence for the benefit of commerce and navigation, the reporting of temperature and rain-fall conditions for the cotton interests, the display of frost and cold-wave signals, the distribution of meteorological information in the interests of agriculture and commerce, and the taking of such meteorological observations as may be necessary to establish and record the climatic conditions of the United States, or as are essential for the proper execution of the foregoing duties.

SEC. 4. That the Weather Bureau shall hereafter consist of one Chief of Weather Bureau and such civilian employees as Congress may annually provide for and as may be necessary to properly perform the duties devolving on said bureau by law, and the chief of said bureau shall receive an annual compensation of four thousand five hundred dollars, and be appointed by the President, by and with the advice and consent of the Senate: *Provided*, That the Chief Signal Officer of the Army may, in the discretion of the President, be detailed to take charge of said bureau, and in like manner other officers of the Army, not exceeding four, expert in the duties of the weather service, may be assigned to duty with the Weather Bureau, and while so serving shall receive the pay and allowances to which they are entitled by law.

SEC. 5. That the enlisted force of the Signal Corps, excepting those hereinafter provided for, shall be honorably discharged from the Army on June thirtieth, eighteen hundred and ninety-one, and such portion of this entire force, including the civilian employees of the Signal Service, as may be necessary for the proper performance of the duties of the Weather Bureau, shall, if they so elect, be transferred to the Department of Agriculture, and the compensation of the force so transferred shall continue as it shall be in the Signal Service

on June thirtieth, eighteen hundred and ninety-one, until otherwise provided by law: *Provided*, That skilled observers serving in the Signal Service at said date shall be entitled to preference over other persons not in the Signal Service for appointment in the Weather Bureau to places for which they may be properly qualified until the expiration of the time for which they last enlisted.

SEC. 9. That on and after July first, eighteen hundred and ninety-one, the appropriations for the support of the Signal Corps of the Army shall be made with those of other staff corps of the Army, and the appropriations for the support of the Weather Bureau shall be made with those of the other bureaus of the Department of Agriculture, and it shall be the duty of the Secretary of Agriculture to prepare future estimates for the Weather Bureau which shall be hereafter specially developed and extended in the interests of agriculture. (26 Stat. L., 653.)

#### LANDS FOR AGRICULTURAL COLLEGES.

The day following the establishment of the Department the law granting public lands for the establishment of agricultural colleges was approved by President Lincoln. The original bill for this purpose was introduced in the House in 1857 by Hon. Justin S. Morrill. It was passed, but was vetoed by President Buchanan. In December, 1861, Mr. Morrill introduced his bill again, but on May 2, 1862, Senator Wade offered a similar bill in the Senate, and in June it passed both Houses.

The act passed through the efforts of Hon. William Hatch, the Morrill law of 1890, the Adams law of 1906 (p. 67), and this act constitute the largest Government aid to education in the history of this country.

AN ACT donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there be granted to the several States, for the purposes herein-after mentioned, an amount of public land, to be apportioned to each State a quantity equal to thirty thousand acres for each Senator and Representative in Congress to which the States are respectively entitled by the apportionment under the census of eighteen hundred and sixty: *Provided*, That no mineral lands shall be selected or purchased under the provisions of this act.

SEC. 2. That the land aforesaid, after being surveyed, shall be apportioned to the several States in sections or subdivisions of sections, not less than one-quarter of a section; and whenever there are public lands in a State subject to sale at private entry at one dollar and twenty-five cents per acre, the quantity to which said State shall be entitled shall be selected from such lands within the limits of such State, and the Secretary of the Interior is hereby directed to issue to each of the States in which there is not the quantity of public lands subject to sale at private entry at one dollar and twenty-five cents per acre, to which said State may be entitled under the provisions of this act, land scrip to the amount in acres for the deficiency of its distributive share; said scrip to be sold by said States and the proceeds thereof applied to the uses and purposes prescribed in this act, and for no other use or purpose whatsoever: *Provided*, That in no case shall any State to which land scrip may thus be issued be allowed to locate the same within the limits of any other State, or of any Territory of the United States, but their assignees may thus locate said land scrip upon any of the unappropriated lands of the United States subject to sale at private entry at one dollar and twenty-five cents, or less, per acre: *And provided further*, That not





SENATOR JUSTIN S. MORRILL.

Father of the Agricultural and Mechanical Colleges. Died December 26, 1898.



HON. WILLIAM H. HATCH.

Father of Agricultural Experiment Stations. Died December 24, 1896.



more than one million acres shall be located by such assignees in any one of the States: *And provided further*, That no such location shall be made before one year from the passage of this act.

SEC. 3. That all the expenses of management, superintendence, and taxes from date of selection of said lands, previous to their sales, and all expenses incurred in the management and disbursement of the moneys which may be received therefrom, shall be paid by the States to which they may belong, out of the treasury of said States, so that the entire proceeds of the sale of said lands shall be applied without any diminution whatever to the purposes hereinafter mentioned.

SEC. 4. That all moneys derived from the sale of the lands aforesaid by the States to which the lands are apportioned, and from the sales of land scrip hereinbefore provided for, shall be invested in stocks of the United States, or of the States, or some other safe stocks, yielding not less than five per centum upon the par value of said stocks; and that the moneys so invested shall constitute a perpetual fund, the capital of which shall remain forever undiminished (except so far as may be provided in section fifth of this act), and the interest of which shall be inviolably appropriated, by each State which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.

SEC. 5. That the grant of land and land scrip hereby authorized shall be made on the following conditions, to which, as well as to the provisions hereinbefore contained the previous assent of the several States shall be signified by legislative acts:

First. If any portion of the fund invested, as provided by the foregoing section, or any portion of the interest thereon, shall, by any action or contingency, be diminished or lost, it shall be replaced by the State to which it belongs, so that the capital of the fund shall remain forever undiminished; and the annual interest shall be regularly applied without diminution to the purposes mentioned in the fourth section of this act, except that a sum, not exceeding ten per centum upon the amount received by any State under the provisions of this act, may be expended for the purchase of lands for sites or experimental farms, whenever authorized by the respective legislatures of said States.

Second. No portion of said fund, nor the interest thereon, shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings.

Third. Any State which may take and claim the benefit of the provisions of this act shall provide, within five years, at least not less than one college, as described in the fourth section of this act, or the grant to such State shall cease; and said State shall be bound to pay the United States the amount received of any lands previously sold, and that the title to purchasers under the State shall be valid.

Fourth. An annual report shall be made regarding the progress of each college, recording any improvements and experiments made, with their cost and results, and such other matters, including State industrial and economical statistics, as may be supposed useful; one copy of which shall be transmitted by mail free, by each, to all the other colleges which may be endowed under the provisions of this act, and also one copy to the Secretary of the Interior.

Fifth. When lands shall be selected from those which have been raised to double the minimum price, in consequence of railroad grants, they shall be computed to the States at the maximum price, and the number of acres proportionately diminished.

Sixth. No State while in a condition of rebellion or insurrection against the Government of the United States shall be entitled to the benefit of this act.

Seventh. No State shall be entitled to the benefits of this act unless it shall express its acceptance thereof by its legislature within two years from the date of its approval by the President.

SEC. 6. That land scrip issued under the provisions of this act shall not be subject to location until after the first day of January, one thousand eight hundred and sixty-three.

SEC. 7. That the land officers shall receive the same fees for locating land scrip issued under the provisions of this act as is now allowed for the location of military bounty land warrants under existing laws: *Provided*, Their maximum compensation shall not be thereby increased.

SEC. 8. That the governors of the several States to which scrip shall be issued under this act shall be required to report annually to Congress all sales made of such scrip until the whole shall be disposed of, the amount received for the same, and what appropriation has been made of the proceeds.

(12 Stat. L., 503.)

#### LAW ESTABLISHING AGRICULTURAL EXPERIMENT STATIONS.

The agricultural colleges felt the need of experimental work early in their history and their active men urged the establishment of an experiment station in connection with each college. Following a national meeting of agricultural college men, presided over by Commissioner Colman, the law for this purpose known as the Hatch Act was passed and became law on March 2, 1887.

AN ACT to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July second, eighteen hundred and sixty two, and of the acts supplementary thereto.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, under direction of the college or colleges or agricultural department of colleges in each State or Territory established, or which may hereafter be established, in accordance with the provisions of an act approved July second, eighteen hundred and sixty-two, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the supplements to said act, a department to be known and designated as an "agricultural experiment station:" *Provided*, That in any State or Territory in which two such colleges have been or may be so established the appropriation hereinafter made to such State or Territory shall be equally divided between such colleges, unless the legislature of such State or Territory shall otherwise direct.

SEC. 2. That it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 3. That in order to secure, as far as practicable, uniformity of methods and results in the work of said stations, it shall be the duty of the United States Commissioner of Agriculture to furnish forms, as far as practicable, for the tabulation of results of investigation or experiments; to indicate from time to time such lines of inquiry as to him

shall seem most important; and, in general, to furnish such advice and assistance as will best promote the purpose of this act. It shall be the duty of each of said stations annually, on or before the first day of February, to make to the governor of the State or Territory in which it is located a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of said stations, to the said Commissioner of Agriculture, and to the Secretary of the Treasury of the United States.

SEC. 4. That bulletins or reports of progress shall be published at said stations at least once in three months, one copy of which shall be sent to each newspaper in the States or Territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the station will permit. Such bulletins or reports and the annual reports of said stations shall be transmitted in the mails of the United States free of charge for postage, under such regulations as the Postmaster-General may from time to time prescribe.

SEC. 5. That for the purpose of paying the necessary expenses of conducting investigations and experiments and printing and distributing the results as hereinbefore prescribed, the sum of fifteen thousand dollars per annum is hereby appropriated to each State, to be specially provided for by Congress in the appropriations from year to year, and to each Territory entitled under the provisions of section eight of this act, out of any money in the Treasury proceeding from the sales of public lands, to be paid in equal quarterly payments on the first day of January, April, July, and October in each year, to the treasurer or other officer duly appointed by the governing boards of said colleges to receive the same, the first payment to be made on the first day of October, eighteen hundred and eighty-seven: *Provided, however,* That out of the first annual appropriation so received by any station an amount not exceeding one-fifth may be expended in the erection, enlargement, or repair of a building or buildings necessary for carrying on the work of such station; and thereafter an amount not exceeding five per centum of such annual appropriation may be so expended.

SEC. 6. That whenever it shall appear to the Secretary of the Treasury from the annual statement of receipts and expenditures of any of said stations that a portion of the preceding annual appropriation remains unexpended, such amount shall be deducted from the next succeeding annual appropriation to such station, in order that the amount of money appropriated to any station shall not exceed the amount actually and necessarily required for its maintenance and support.

SEC. 7. That nothing in this act shall be construed to impair or modify the legal relation existing between any of the said colleges and the government of the States or Territories in which they are respectively located.

SEC. 8. That in States having colleges entitled under this section to the benefits of this act and having also agricultural experiment stations established by law separate from said colleges, such States shall be authorized to apply such benefits to experiments at stations so established by such States; and in case any State shall have established under the provisions of said act of July second, aforesaid, an agricultural department or experimental station, in connection with any university, college, or institution not distinctively an agricultural college or school, and such State shall have established or shall hereafter establish a separate agricultural college or school, which shall have connected therewith an experimental farm or station, the legislature of such State may apply in whole or in part the appropriation by this act made to such separate agricultural college or school, and no legislature shall by contract, express or implied, disable itself from so doing.

SEC. 9. That the grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purposes of said grants: *Provided,* That payment of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of its legislature meeting next after the passage of this act shall be made upon the assent of the governor thereof duly certified to the Secretary of the Treasury.

Sec. 10. Nothing in this act shall be held or construed as binding the United States to continue any payments from the Treasury to any or all the States or institutions mentioned in this act, but Congress may at any time amend, suspend, or repeal any or all the provisions of this act. (24 Stat. L., 440.)

#### ENDOWMENT OF AGRICULTURAL COLLEGES.

The work of the agricultural colleges established under the land grant of 1862 so commended them to favor that in 1890 Mr. Morrill secured for them a further appropriation which now provides \$25,000 a year for each college. The act was approved on August 30, 1900.

AN ACT to apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of an act of Congress approved July second, eighteen hundred and sixty-two.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, arising from the sales of public lands, to be paid as hereinafter provided, to each State and Territory for the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts now established, or which may be hereafter established, in accordance with an act of Congress approved July second, eighteen hundred and sixty-two, the sum of fifteen thousand dollars for the year ending June thirtieth, eighteen hundred and ninety, and an annual increase of the amount of such appropriation thereafter for ten years by an additional sum of one thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be twenty-five thousand dollars, to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction: *Provided*, That no money shall be paid out under this act to any State or Territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act if the funds received in such State or Territory be equitably divided as hereinafter set forth: *Provided*, That in any State in which there has been one college established in pursuance of the act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character has been established, or may be hereafter established, and is now aided by such State from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the act to which this act is an amendment, the legislature of such State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this act between one college for white students and one institution for colored students established as aforesaid, which shall be divided into two parts and paid accordingly, and thereupon such institution for colored students shall be entitled to the benefits of this act and subject to its provisions, as much as it would have been if it had been included under the act of eighteen hundred and sixty-two, and the fulfillment of the foregoing provisions shall be taken as a compliance with the provision in reference to separate colleges for white and colored students.

Sec. 2. That the sum hereby appropriated to the States and Territories for the further endowment and support of colleges shall be annually paid on or before the thirty-first day of July of each year, by the Secretary of the Treasury, upon the warrant of the Secretary of the Interior, out of the Treasury of the United States, to the State or Territorial treasurer, or to such officer as shall be designated by the laws of such State or Territory to receive the same, who shall, upon the order of the trustees of the college, or the institution for

colored students, immediately pay over said sums to the treasurers of the respective colleges or other institutions entitled to receive the same, and such treasurers shall be required to report to the Secretary of Agriculture and to the Secretary of the Interior, on or before the first day of September of each year, a detailed statement of the amount so received and of its disbursement. The grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants: *Provided*, That payments of such installments of the appropriation herein made as shall become due to any State before the adjournment of the regular session of legislature meeting next after the passage of this act shall be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury.

SEC. 3. That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support, and maintenance of colleges, or of institutions for colored students, as provided in this act, shall, by any action or contingency, be diminished or lost, or be misapplied, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings. An annual report by the president of each of said colleges shall be made to the Secretary of Agriculture, as well as to the Secretary of the Interior, regarding the condition and progress of each college, including statistical information in relation to its receipts and expenditures, its library, the number of its students and professors, and also as to any improvements and experiments made under the direction of any experiment stations attached to said colleges, with their costs and results, and such other industrial and economical statistics as may be regarded as useful, one copy of which shall be transmitted by mail free to all other colleges further endowed under this act.

SEC. 4. That on or before the first day of July in each year, after the passage of this act, the Secretary of the Interior shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is entitled to receive its share of the annual appropriation for colleges, or of institutions for colored students, under this act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of the Interior shall withhold a certificate from any State or Territory of its appropriation the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of the Interior. If the next Congress shall not direct such sum to be paid it shall be covered into the Treasury. And the Secretary of the Interior is hereby charged with the proper administration of this law.

SEC. 5. That the Secretary of the Interior shall annually report to Congress the disbursements which have been made in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.

SEC. 6. Congress may at any time amend, suspend, or repeal any or all of the provisions of this act. (26 Stat. L., 419.)

#### INCREASE OF EXPERIMENT STATION FUNDS.

Early in the new century the need of more money for the State experiment stations began to be urgent. After conference with Professor Henry and other station leaders, Representative H. C. Adams, of Wisconsin, drew a bill which was indorsed by the American Association of Agricultural Colleges and Experiment Stations. This was introduced by Mr. Adams, and by his persistent efforts, aided by the association executive committee and leaders, was perfected and became law by the approval of President Roosevelt on March 16, 1906.

AN ACT to provide for an increased annual appropriation for agricultural experiment stations and regulating the expenditure thereof.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise appropriated, to be paid as hereinafter provided, to each State and Territory, for the more complete endowment and maintenance of agricultural experiment stations now established or which may hereafter be established in accordance with the Act of Congress approved March second, eighteen hundred and eighty-seven, the sum of five thousand dollars in addition to the sum named in said Act for the year ending June thirtieth, nineteen hundred and six, and an annual increase of the amount of such appropriation thereafter for five years by an additional sum of two thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be thirty thousand dollars, to be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due regard to the varying conditions and needs of the respective States or Territories.

SEC. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of agricultural experiment stations shall be annually paid in equal quarterly payments on the first day of January, April, July, and October of each year by the Secretary of the Treasury, upon the warrant of the Secretary of Agriculture, out of the Treasury of the United States, to the treasurer or other officer duly appointed by the governing boards of said experiment stations to receive the same, and such officers shall be required to report to the Secretary of Agriculture on or before the first day of September of each year a detailed statement of the amount so received and of its disbursement, on schedules prescribed by the Secretary of Agriculture. The grants of money authorized by this Act are made subject to legislative assent of the several States and Territories to the purpose of said grants: *Provided*, That payment of such installments of the appropriation herein made as shall become due to any State or Territory before the adjournment of the regular session of legislature meeting next after the passage of this Act shall be made upon the assent of the governor thereof, duly certified by the Secretary of the Treasury.

SEC. 3. That if any portion of the moneys received by the designated officer of any State or Territory for the further and more complete endowment, support, and maintenance of agricultural experiment stations as provided in this Act shall by any action or contingency be diminished or lost or be misapplied, it shall be replaced by said State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys exceeding five per centum of each annual appropriation shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings, or to the purchase or rental of land. It shall be the duty of each of said stations annually, on or before the first day of February, to make to the governor of the State or Territory in which it is located a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of said stations, to the Secretary of Agriculture, and to the Secretary of the Treasury of the United States.

SEC. 4. That on or before the first day of July in each year after the passage of this Act the Secretary of Agriculture shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is complying with the provisions of this Act and is entitled to receive its share of the annual appropriation for agricultural experiment stations under this Act and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of Agriculture shall withhold a certificate from any State or Territory of its appropriation, the facts and reasons therefor shall be reported to the President and the amount involved shall be kept separate in the Treasury until the close of the next Congress in order that the State or Territory may, if it shall so desire, appeal to Congress from the determination of the Secretary of Agriculture. If the next Congress shall not direct such



sum to be paid, it shall be covered into the Treasury; and the Secretary of Agriculture is hereby charged with the proper administration of this law.

SEC. 5. That the Secretary of Agriculture shall make an annual report to Congress on the receipts and expenditures and work of the agricultural experiment stations in all of the States and Territories, and also whether the appropriation of any State or Territory has been withheld; and if so, the reason therefor.

SEC. 6. That Congress may at any time amend, suspend, or repeal any or all of the provisions of this Act. (Stat. 59th Cong., 1st sess., chap. 961.)

#### TRANSFER OF FOREST RESERVES TO THE DEPARTMENT.

The work of Gifford Pinchot as Forester of the Department of Agriculture gave confidence that the National forest reserves could be best managed in that Department, and the transfer was made under a law approved February 1, 1905.

AN ACT providing for the transfer of forest reserves from the Department of the Interior to the Department of Agriculture.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Secretary of the Department of Agriculture shall, from and after the passage of this Act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the Act entitled "An Act to repeal the timber-culture laws, and for other purposes," approved March third, eighteen hundred and ninety-one, and Acts supplemental to and amendatory thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any of such lands.

SEC. 2. That pulp wood or wood pulp manufactured from timber in the district of Alaska may be exported therefrom.

SEC. 3. That forest supervisors and rangers shall be selected, when practicable, from qualified citizens of the States or Territories in which the said reserves, respectively, are situated.

SEC. 4. That rights of way for the construction and maintenance of dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals, within and across the forest reserves of the United States, are hereby granted to citizens and corporations of the United States for municipal or mining purposes, and for the purposes of the milling and reduction of ores, during the period of their beneficial use, under such rules and regulations as may be prescribed by the Secretary of the Interior, and subject to the laws of the State or Territory in which said reserves are respectively situated.

SEC. 5. That all money received from the sale of any products or the use of any land or resources of said forest reserves shall be covered into the Treasury of the United States and for a period of five years from the passage of this Act shall constitute a special fund available, until expended, as the Secretary of Agriculture may direct, for the protection, administration, improvement, and extension of Federal forest reserves. (33 Stat. L., 628.)

The law under which forest reserves have been established during the past fifteen years is section 24 of the act repealing the timber-culture law which was approved on March 3, 1891. The section is as follows:

SEC. 24. The President of the United States may, from time to time, set apart and reserve, in any State or Territory having public lands bearing forests, any parts of the public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as public reservations, and the President shall, by public proclamation, declare the establishment of such reservations and the limits thereof. (26 Stat. L. 1103.)

**PRESERVATION, INTRODUCTION, DISTRIBUTION AND RESTORATION OF BIRDS.**

Legislation for protection of game was encouraged by a Connecticut decision in 1896, that game is the property of the State. After much discussion, beginning in 1897, a law introduced by Hon. John F. Lacey, of Iowa, was finally passed by Congress and approved by President McKinley on May 25, 1900.

AN ACT to enlarge the powers of the Department of Agriculture, prohibit the transportation by interstate commerce of game killed in violation of local laws, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the duties and powers of the Department of Agriculture are hereby enlarged so as to include the preservation, distribution, introduction, and restoration of game birds and other wild birds. The Secretary of Agriculture is hereby authorized to adopt such measures as may be necessary to carry out the purposes of this Act and to purchase such game birds and other wild birds as may be required therefor, subject, however, to the laws of the various States and Territories. The object and purpose of this Act is to aid in the restoration of such birds in those parts of the United States adapted thereto where the same have become scarce or extinct, and also to regulate the introduction of American or foreign birds or animals in localities where they have not heretofore existed.

The Secretary of Agriculture shall from time to time collect and publish useful information as to the propagation, uses, and preservation of such birds.

And the Secretary of Agriculture shall make and publish all needful rules and regulations for carrying out the purposes of this Act, and shall expend for said purposes such sums as Congress may appropriate therefor.

SEC. 2. That it shall be unlawful for any person or persons to import into the United States any foreign wild animal or bird except under special permit from the United States Department of Agriculture: *Provided*, That nothing in this section shall restrict the importation of natural history specimens for museums or scientific collections, or the importation of certain cage birds, such as domesticated canaries, parrots, or such other species as the Secretary of Agriculture may designate.

The importation of the mongoose, the so-called "flying foxes" or fruit bats, the English sparrow, the starling, or such other birds or animals as the Secretary of Agriculture may from time to time declare injurious to the interest of agriculture or horticulture is hereby prohibited, and such species upon arrival at any of the ports of the United States shall be destroyed or returned at the expense of the owner. The Secretary of the Treasury is hereby authorized to make regulations for carrying into effect the provisions of this section.

SEC. 3. That it shall be unlawful for any person or persons to deliver to any common carrier, or for any common carrier to transport from one State or Territory to another State or Territory, or from the District of Columbia or Alaska to any State or Territory, or from any State or Territory to the District of Columbia or Alaska, any foreign animals or birds the importation of which is prohibited, or the dead bodies or parts thereof of any wild animals or birds, where such animals or birds have been killed in violation of the laws of the State, Territory, or District in which the same were killed: *Provided*, That nothing herein shall prevent the transportation of any dead birds or animals killed during the season when the same may be lawfully captured, and the export of which is not prohibited by law in the State, Territory, or District in which the same are killed.

SEC. 4. That all packages containing such dead animals, birds, or parts thereof, when shipped by interstate commerce, as provided in section one of this Act, shall be plainly and clearly marked, so that the name and address of the shipper and the nature of the contents may be readily ascertained on inspection of the outside of such packages. For each

evasion or violation of this Act the shipper shall, upon conviction, pay a fine of not exceeding two hundred dollars; and the consignee knowingly receiving such articles so shipped and transported in violation of this Act shall, upon conviction, pay a fine of not exceeding two hundred dollars; and the carrier knowingly carrying or transporting the same shall, upon conviction, pay a fine of not exceeding two hundred dollars.

SEC. 5. That all dead bodies, or parts thereof, of any foreign game animals, or game or song birds, the importation of which is prohibited, or the dead bodies, or parts thereof, of any wild game animals, or game or song birds transported into any State or Territory, or remaining therein for use, consumption, sale, or storage therein, shall upon arrival in such State or Territory be subject to the operation and effect of the laws of such State or Territory enacted in the exercise of its police powers, to the same extent and in the same manner as though such animals and birds had been produced in such State or Territory, and shall not be exempt therefrom by reason of being introduced therein in original packages or otherwise. This Act shall not prevent the importation, transportation, or sale of birds or bird plumage manufactured from the feathers of barnyard fowl. (31 Stat. L., 187-189.)

Other acts of Congress make further provision for the preservation and importation of game. The essential parts of these laws are as follows:

\* \* \* the Secretary of Agriculture shall have the power to authorize the importation of eggs of game birds for purposes of propagation, and he shall prescribe all necessary rules and regulations governing the importation of eggs of said birds for such purposes. (32 Stat. L., 285.)

\* \* \* the Secretary of Agriculture is hereby authorized whenever he shall deem it necessary for the preservation of game animals or birds to make and publish rules and regulations which shall modify the close seasons hereinbefore established, or provide different close seasons for different parts of Alaska, or place further restrictions and limitations on the killing of such animals or birds in any given locality, or to prohibit killing entirely for a period not exceeding five years in such locality.

\* \* \* And the Secretary of Agriculture is authorized to make and publish such further restrictions as he may deem necessary to prevent undue destruction of wild game animals or wild birds.

\* \* \* nothing in this Act shall be construed to prevent the collection of specimens for scientific purposes, the capture or shipment of live animals and birds for exhibition and propagation, or the export from Alaska of specimens and trophies, under such restrictions and limitations as the Secretary of Agriculture may prescribe and publish. (32 Stat. L., 327.)

\* \* \* it shall be unlawful for any person to hunt, trap, capture, willfully disturb, or kill any bird of any kind whatever or take the eggs of such birds on any lands of the United States which have been set apart or reserved as breeding grounds for birds by any law, proclamation, or Executive order, except under such rules and regulations as may be prescribed from time to time by the Secretary of Agriculture. (Stat. 59th Cong., 1st sess., chap. 3565.)

The meat and food inspection laws now in force are parts of the appropriation bill of the Department for the current year, and can there be found. Also there are several laws and parts of laws which govern the Department activities but are not here cited because they are deemed to be of minor importance.

## APPROPRIATIONS AND DISBURSEMENTS.

The following statement of appropriations and disbursements, which is furnished by the Disbursing Officer, shows in detail all moneys expended by the Department of Agriculture since its earliest beginnings:

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture from the fiscal year 1839 to the fiscal year 1906, inclusive.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Collection of agricultural statistics, etc.	Mar. 3, 1839	5	354	9	1839	\$1,000.00	\$1,000.00	-----
	Aug. 26, 1842	5	533	26	1842	1,000.00	1,000.00	-----
	Mar. 3, 1843	5	642	1	1844	2,000.00	2,000.00	-----
	June 17, 1844	5	687	1	1845	2,000.00	2,000.00	-----
	Mar. 3, 1845	5	757	1	1846	3,000.00	3,000.00	-----
	Mar. 3, 1847	9	160	1	1847	3,000.00	3,000.00	-----
	Aug. 12, 1848	9	285	1	1848	3,500.00	3,500.00	-----
Chemical analyses of vegetable substances	do.	9	285	1	1848	1,000.00	1,000.00	-----
Collection of agricultural statistics, etc.	Mar. 3, 1849	9	364	1	1849	3,500.00	3,500.00	-----
Chemical analyses of vegetable substances	do.	9	364	1	1850	1,000.00	1,000.00	-----
Collection of agricultural statistics	Sept. 30, 1850	9	541	1	1850	4,500.00	4,500.00	-----
	Mar. 3, 1851	9	615	1	1851	5,500.00	5,500.00	-----
Collection of agricultural statistics and purchase of seeds.	Aug. 31, 1852	10	95	1	1852	5,000.00	5,000.00	-----
Collection of agricultural statistics and purchase, etc., of seeds	Mar. 3, 1853	10	208	1	1853	5,000.00	5,000.00	-----
	May 31, 1854	10	2-2	1	1854	10,000.00	10,000.00	-----
	Aug. 4, 1854	10	567	1	1855	50,000.00	50,000.00	-----
	Mar. 3, 1855	10	604	1	1855	50,000.00	50,000.00	-----
Collection of agricultural statistics, etc., and purchase, etc., of seeds.	May 15, 1856	11	14	1	1856	30,000.00	30,000.00	-----
	Aug. 18, 1856	11	89	1	1857	75,000.00	75,000.00	-----
	Mar. 3, 1857	11	226	1	1858	60,000.00	60,000.00	-----
Information in relation to consumption of cotton	do.	11	226	1	1858	3,500.00	3,157.25	\$342.75
	June 12, 1858	11	321	1	1859	60,000.00	60,000.00	-----
Collection of agricultural statistics, etc., and purchase, etc., of seeds.	Mar. 3, 1859	11	427	1	1860	40,000.00	40,000.00	-----
	June 25, 1860	12	108	1	1861	60,000.00	60,000.00	-----
	Mar. 2, 1861	12	217	1	1862	64,000.00	63,704.21	295.79
	Feb. 13, 1862	12	338	1	1862	64,000.00	63,704.21	295.79
Collection of agricultural statistics, etc., and purchase, etc., of seeds, including a deficiency appropriation of \$20,000, made March 3, 1863.	Mar. 1, 1862	12	350	1	1863	80,000.00	80,000.00	-----
Salaries	Feb. 25, 1863	12	691	1	1864	5,000.00	5,000.00	-----
Collection of agricultural statistics, etc., and purchase, etc., of seeds.	do.	12	691	1	1864	87,000.00	87,000.00	-----
Culture of cotton and tobacco.	do.	12	6-1	1	1864	3,000.00	3,000.00	-----
Investigations with flax and hemp	do.	12	691	1	1864	20,000.00	9,500.00	10,500.00
Purchase of sorghum seed.	Mar. 14, 1864	13	23	1	1864	2,000.00	2,000.00	-----
To rebuild shop in propagating garden.	do.	13	23	1	1864	800.00	800.00	-----
Postage	do.	13	23	1	1864	1,320.00	1,320.00	-----
Furniture, carpets, fuel, etc.	do.	13	23	1	1864	650.00	650.00	-----
Salaries	June 25, 1864	13	155	1	1865	38,300.00	38,300.00	-----
	July 2, 1864	13	350	2	1865	3,500.00	3,500.00	-----
Contingent expenses	June 25, 1864	13	155	1	1865	3,500.00	3,500.00	-----
Collecting agricultural statistics	do.	13	155	1	1865	20,000.00	20,000.00	-----
Furniture, carpets, etc.	do.	13	155	1	1865	800.00	800.00	-----
Library and laboratory.	do.	13	155	1	1865	4,000.00	4,000.00	-----
Purchase and distribution of seeds	do.	13	155	1	1865	61,000.00	61,000.00	-----
Experimental garden and grounds.	do.	13	155	1	1865	15,800.00	15,800.00	-----
To pay a debt incurred in preparing the Agricultural Report for 1861.	July 2, 1864	13	350	2	1865	3,704.05	3,536.55	107.50
Rent, etc., of Commissioner's office.	July 4, 1864	13	381	3	1865	3,500.00	3,500.00	-----
	do.	13	160	3	1866	46,726.59	46,726.59	-----
Salaries	Mar. 2, 1865	13	455	1	1866	46,726.59	46,726.59	-----

*Statement of appropriations, disbursements, and unexpended balances for the United States  
Department of Agriculture, etc.—Continued.*

Purpose.	Date of ap- propriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropri- ated.	Amount disbursed.	Amount unex- pended.
		Vol.	Page.	Sec.				
Contingent expenses.	Mar. 2, 1865	13	455	1	1866	\$7,500.00	\$7,500.00	.....
Collecting agricultural statis- tics.	do.	13	455	1	1866	20,000.00	20,000.00	.....
Purchase, etc., of seeds.	do.	13	180	3	1866	70,165.90	70,165.90	.....
Experimental garden and grounds, etc.	do.	13	455	1	1866	23,395.33	23,395.33	.....
Salaries.	July 23, 1866	13	180	3	1866	39,600.00	39,600.00	.....
Contingent expenses.	do.	14	201	1	1867	11,500.00	11,500.00	.....
Collecting agricultural statis- tics.	do.	14	201	1	1867	10,000.00	10,000.00	.....
Purchase of seeds.	do.	14	201	1	1867	115,200.00	115,200.00	.....
Experimental garden and grounds, etc.	Mar. 30, 1867	15	28	1	1867	22,800.00	22,800.00	.....
Salaries.	July 23, 1866	14	202	1	1867	38,020.00	38,020.00	.....
Contingent expenses.	Mar. 2, 1867	14	451	1	1868	13,000.00	13,000.00	.....
Collecting agricultural statis- tics.	do.	14	451	1	1868	10,000.00	8,406.34	\$1,593.66
Purchase, etc., of seeds.	do.	14	452	1	1868	85,200.00	85,200.00	.....
Museum.	do.	14	452	1	1868	10,000.00	10,000.00	.....
Experimental garden and grounds.	do.	14	452	1	1868	22,800.00	22,800.00	.....
To erect a building for the De- partment of Agriculture.	do.	14	464	1	1868	100,000.00	99,668.00	332.00
For certain goods and services furnished the Department.	do.	14	464	1	1868	37,604.70	37,604.70	.....
Salaries.	July 13, 1868	15	90	1	1869	65,368.00	65,368.00	.....
Collecting agricultural statis- tics.	July 20, 1868	15	105	1	1869	10,000.00	10,000.00	.....
Contingent expenses.	do.	15	106	1	1869	31,090.00	31,090.00	.....
Experimental garden and grounds.	do.	15	136	1	1869	23,500.00	23,500.00	.....
Purchase, etc., of seeds.	do.	15	106	1	1869	20,000.00	20,000.00	.....
Furniture, cases, and repairs.	do.	15	106	1	1869	22,635.00	22,635.00	.....
Salaries.	Mar. 3, 1869	15	297	1	1870	69,240.00	67,720.00	1,520.00
Collecting agricultural statis- tics.	do.	15	298	1	1870	15,000.00	15,000.00	.....
Investigations of cattle disease.	do.	15	298	1	1870	15,000.00	12,695.60	2,304.40
Contingent expenses.	do.	15	298	1	1870	13,200.00	13,200.00	.....
Furniture, cases, and repairs.	do.	15	298	1	1870	2,500.00	2,500.00	.....
Experimental garden and grounds.	do.	15	298	1	1870	21,500.00	21,500.00	.....
Purchase, etc., of seeds.	do.	15	298	1	1870	20,000.00	18,981.33	1,018.67
Salaries.	July 12, 1870	16	245	1	1871	71,980.00	71,811.64	168.36
Collecting agricultural statis- tics.	July 15, 1870	16	314	1	1871	15,000.00	15,000.00	.....
Purchase, etc., of seeds.	do.	16	246	1	1871	30,000.00	28,865.17	1,134.83
Experimental garden and grounds.	do.	16	246	1	1871	53,200.00	53,200.00	.....
Contingent expenses.	July 15, 1870	16	302	1	1871	8,100.00	8,100.00	.....
Furniture, cases, and repairs.	do.	16	303	1	1871	4,700.00	4,700.00	.....
Collecting and modeling speci- mens of fruit.	do.	16	246	1	1871	1,000.00	1,000.00	.....
Library.	do.	16	246	1	1871	1,000.00	1,000.00	.....
Herbarium.	do.	16	246	1	1871	1,000.00	1,000.00	.....
Laboratory.	do.	16	246	1	1871	1,700.00	1,700.00	.....
Folding room.	do.	16	246	1	1871	500.00	500.00	.....
Salaries.	Mar. 3, 1871	16	483	1	1872	75,170.00	75,017.83	152.11
Collecting agricultural statis- tics.	do.	16	483	1	1872	15,000.00	14,053.36	946.64
Purchase and distribution of seeds, etc.	do.	16	489	1	1872	45,000.00	45,000.00	.....
Experimental garden and grounds.	do.	16	489	1	1872	36,800.00	36,800.00	.....
Contingent expenses.	do.	16	503	1	1872	12,900.00	12,900.00	.....
Furniture, cases, and repairs.	do.	16	489	1	1872	4,700.00	4,700.00	.....
Collecting and modeling speci- mens of fruit.	do.	16	490	1	1872	1,000.00	1,000.00	.....
Herbarium.	do.	16	490	1	1872	1,000.00	1,000.00	.....
Library.	do.	16	490	1	1872	2,050.00	2,050.00	.....

# 74 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Laboratory.....	Mar. 3, 1871	16	490	1	1872	\$3,450.00	\$3,450.00	.....
Salaries.....	May 8, 1872	17	77	1	1873	75,890.00	75,889.73	\$0.27
Collecting agricultural statistics.....	do.....	17	77	1	1873	15,000.00	15,000.00	.....
Purchase and distribution of seeds.....	do.....	17	77	1	1873	55,000.00	55,000.00	.....
Experimental garden and grounds.....	June 10, 1872	17	368	1	1873	31,000.00	31,000.00	.....
Contingent expenses.....	May 8, 1872	17	77	1	1873	13,300.00	12,507.06	792.94
Folding room.....	do.....	17	77	1	1873	300.00	300.00	.....
Furniture, cases, and repairs.....	do.....	17	78	1	1873	5,200.00	5,200.00	.....
Museum and herbarium.....	do.....	17	78	1	1873	5,000.00	4,674.43	325.57
Library.....	June 10, 1872	17	369	1	1873	1,750.00	1,750.00	.....
Salaries.....	May 8, 1872	17	78	1	1873	78,190.00	76,924.00	1,266.00
Collecting agricultural statistics.....	Mar. 3, 1873	17	506	1	1874	15,000.00	11,553.20	3,446.80
Purchase and distribution of seeds, etc.....	do.....	17	506	1	1874	65,000.00	64,904.89	95.11
Experimental garden and grounds.....	do.....	17	507	1	1874	26,200.00	25,731.74	468.26
Museum and herbarium.....	do.....	17	507	1	1874	2,000.00	1,942.02	57.98
Contingent expenses.....	do.....	17	507	1	1874	13,600.00	12,699.34	900.66
Furniture, cases, and repairs.....	do.....	17	507	1	1874	4,200.00	3,302.40	897.60
Library.....	do.....	17	507	1	1874	1,500.00	1,259.10	240.90
Postage.....	do.....	17	542	4	1874	52,000.00	35,449.09	16,550.91
Salaries.....	June 20, 1874	18	107	1	1875	77,180.00	77,127.60	52.40
Collecting agricultural statistics.....	do.....	18	107	1	1875	15,000.00	12,147.56	2,852.44
Purchase and distribution of seeds, etc.....	do.....	18	107	1	1875	95,000.00	94,719.83	280.17
Furniture, cases, and repairs.....	Jan. 25, 1875	18	303	3	1875	4,200.00	4,135.36	64.64
Experimental garden and grounds.....	June 20, 1874	18	107	1	1875	24,100.00	24,094.06	5.94
Contingent expenses.....	June 23, 1874	18	227	1	1875	12,600.00	10,972.61	1,627.39
Museum and herbarium.....	do.....	18	107	1	1875	4,500.00	3,300.00	1,020.00
Laboratory.....	June 23, 1874	18	227	1	1875	1,300.00	1,300.00	.....
Library.....	do.....	18	227	1	1875	1,500.00	1,087.90	412.10
Postage.....	do.....	18	227	1	1875	52,000.00	42,633.00	9,367.00
To publish Commissioner's report for the years 1872 and 1873.....	June 23, 1874	18	227	1	1875	50,000.00	49,561.91	438.09
Salaries.....	Mar. 3, 1875	18	368	1	1876	77,180.00	77,115.71	64.29
Collecting agricultural statistics.....	do.....	18	368	1	1876	15,000.00	14,500.00	500.00
Purchase and distribution of seeds.....	do.....	18	368	1	1876	65,000.00	65,000.00	.....
Experimental garden and grounds.....	do.....	18	368	1	1876	19,990.00	19,956.11	33.89
Museum and herbarium.....	do.....	18	394	1	1876	2,000.00	1,993.55	6.45
Furniture, cases, and repairs.....	do.....	18	368	1	1876	3,300.00	3,124.23	175.77
Library.....	do.....	18	368	1	1876	1,250.00	1,046.84	203.16
Laboratory.....	do.....	18	368	1	1876	1,300.00	1,300.00	.....
Contingent expenses.....	do.....	18	368	1	1876	12,100.00	11,378.91	721.09
Postage.....	do.....	18	368	1	1876	52,000.00	3,428.29	48,571.71
Salaries.....	July 21, 1876	19	95	1	1877	67,836.96	67,806.19	30.77
Experimental garden and grounds.....	Aug. 15, 1876	19	167	1	1877	11,550.00	11,550.00	.....
Collecting agricultural statistics.....	Aug. 15, 1876	19	115	1	1877	10,000.00	10,000.00	.....
Purchase and distribution of seeds, etc.....	do.....	19	167	1	1877	85,000.00	80,000.00	5,000.00
Museum and herbarium.....	Mar. 3, 1877	19	319	1	1877	2,000.00	2,000.00	.....
Furniture, cases, and repairs.....	Aug. 15, 1876	19	167	1	1877	2,000.00	2,000.00	.....
Library.....	do.....	19	167	1	1877	1,000.00	800.00	200.00
Laboratory.....	do.....	19	167	1	1877	1,300.00	1,300.00	.....
Contingent expenses.....	do.....	19	167	1	1877	10,000.00	8,800.00	1,200.00
Postage.....	do.....	19	167	1	1877	4,000.00	3,950.00	50.00
Salaries.....	Mar. 3, 1877	19	317	1	1878	65,640.00	65,640.00	.....
Collecting agricultural statistics.....	do.....	19	317	1	1878	15,000.00	15,000.00	.....
Purchase and distribution of seeds, etc.....	do.....	19	317	1	1878	75,000.00	74,579.33	420.67

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Experimental garden and grounds.....	Mar. 3, 1877	19	317	1	1878	\$10,500.00	\$10,500.00	.....
Museum.....	do	19	360	1	1878	1,500.00	1,500.00	.....
Furniture, cases, and repairs.....	do	19	317	1	1878	4,500.00	4,500.00	.....
Library.....	do	19	317	1	1878	1,000.00	1,000.00	.....
Laboratory.....	do	19	317	1	1878	1,000.00	1,000.00	.....
Contingent expenses.....	do	19	317	1	1878	8,000.00	8,000.00	.....
Postage.....	do	19	317	1	1878	4,000.00	3,415.61	\$584.39
Report on forestry.....	do	19	360	1	1878	2,500.00	2,500.00	.....
International Industrial Exposition at Paris.....	Dec. 15, 1877	20	246	4	1878	10,000.00	10,000.00	.....
Salaries.....	June 19, 1878	20	203	1	1879	66,900.00	66,900.00	.....
Collecting agricultural statistics.....	do	20	203	1	1879	10,000.00	10,000.00	.....
Purchase and distribution of seeds, etc.....	do	20	203	1	1879	75,000.00	75,000.00	.....
Experimental garden and grounds.....	do	20	203	1	1879	13,500.00	13,500.00	.....
Museum.....	do	20	240	1	1879	1,000.00	1,000.00	.....
Furniture, cases, and repairs.....	do	20	203	1	1879	4,000.00	4,000.00	.....
Library.....	do	20	204	1	1879	1,000.00	1,000.00	.....
Laboratory.....	do	20	204	1	1879	1,500.00	1,500.00	.....
Contingent expenses.....	do	20	204	1	1879	8,000.00	8,000.00	.....
Postage.....	do	20	204	1	1879	4,000.00	3,960.00	40.00
Investigating the history and habits of insects.....	do	20	204	1	1879	10,000.00	10,000.00	.....
Investigating diseases of domestic animals.....	do	20	240	1	1879	10,000.00	10,000.00	.....
To erect a stable.....	Mar. 3, 1879	20	392	1	1879	1,500.00	1,500.00	.....
Salaries.....	June 21, 1879	21	23	1	1880	66,900.00	66,900.00	.....
Collecting agricultural statistics.....	do	21	23	1	1880	10,000.00	9,982.88	17.12
Purchase and distribution of seeds, etc.....	do	21	23	1	1880	75,000.00	75,000.00	.....
Experimental garden and grounds.....	do	21	23	1	1880	13,100.00	13,100.00	.....
Museum.....	do	21	23	1	1880	1,000.00	1,000.00	.....
Furniture, cases, and repairs.....	do	21	23	1	1880	4,000.00	4,000.00	.....
Library.....	do	21	23	1	1880	1,000.00	1,000.00	.....
Laboratory.....	do	21	23	1	1880	1,500.00	1,500.00	.....
Contingent expenses.....	do	21	23	1	1880	8,000.00	8,000.00	.....
Postage.....	do	21	23	1	1880	4,000.00	4,000.00	.....
Investigating the history and habits of insects.....	do	21	29	1	1880	5,000.00	5,000.00	.....
Investigating diseases of domestic animals.....	do	21	30	1	1880	10,000.00	8,878.84	1,121.16
Salaries.....	June 16, 1880	21	292	1	1881	69,200.00	69,185.22	14.78
Purchase and distribution of seeds, etc.....	do	21	294	1	1881	102,160.31	102,157.48	2.83
Collecting agricultural statistics.....	May 3, 1881	21	453	1	1881	10,000.00	9,985.60	14.40
Experimental garden and grounds.....	June 16, 1880	21	293	1	1881	12,600.00	12,600.00	.....
Museum.....	do	21	294	1	1881	1,000.00	1,000.00	.....
Furniture, cases, and repairs.....	do	21	294	1	1881	5,000.00	5,000.00	.....
Library.....	do	21	294	1	1881	1,000.00	1,000.00	.....
Laboratory.....	do	21	295	1	1881	4,000.00	4,000.00	.....
Contingent expenses.....	do	21	295	1	1881	10,000.00	9,769.17	230.83
Postage.....	do	21	295	1	1881	4,000.00	3,838.00	162.00
Report on forestry.....	do	21	296	1	1881	5,000.00	3,762.51	1,237.49
Investigating the history and habits of insects.....	do	21	294	1	1881	5,000.00	4,997.31	2.69
Investigating diseases of domestic animals.....	do	21	295	1	1881	10,000.00	10,000.00	.....
Examination of fibers.....	do	21	295	1	1881	4,000.00	4,000.00	.....
Experiments in the manufacture of sugar.....	do	21	295	1	1881	7,500.00	7,500.00	.....
Collecting data touching arid regions of the United States.....	do	21	295	1	1881	5,000.00	460.00	4,540.00
Reclamation of arid lands.....	do	21	295	1	1881	20,000.00	18,353.55	(a)
Salaries.....	Mar. 3, 1881	21	381	1	1882	79,500.00	79,491.81	8.19
Collecting agricultural statistics.....	do	21	382	1	1882	10,000.00	10,000.00	.....
Laboratory.....	do	21	382	1	1882	6,000.00	5,811.85	188.15

\* Unexpended balance of \$1,646.45 carried to fiscal year 1882

# 76 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Purchase and distribution of seeds, etc.	Mar. 3, 1881 Apr 16, 1882	21 22	382 44	1 1	1882	\$100,000.00	\$99,991.53	\$8.47
Experiments in the culture, etc., of tea.	Mar. 3, 1881	21	383	1	1882	10,000.00	8,750.87	1,249.13
Experimental garden and grounds.	do.	21	383	1	1882	15,000.00	14,968.25	31.75
Museum.	do.	21	385	1	1882	1,000.00	1,000.00	-----
Furniture, cases, and repairs.	do.	21	383	1	1882	4,000.00	4,000.00	-----
Library.	do.	21	383	1	1882	1,000.00	973.85	26.15
Investigating the history and habits of insects.	do.	21	383	1	1882	20,000.00	19,998.94	1.06
Examination of fibers.	do.	21	384	1	1882	5,000.00	5,000.00	-----
Investigating the diseases of domestic animals.	do.	21	384	1	1882	25,000.00	22,443.89	2,556.11
Collecting data touching the arid regions of the United States.	do.	21	384	1	1882	5,000.00	4,216.55	783.45
Reclamation of arid lands, including an unexpended balance of \$1,646.45 from fiscal year 1881.	do.	21	384	1	1882	11,646.45	11,561.19	(a)
Report on forestry.	do.	21	384	1	1882	5,000.00	4,941.00	59.00
Postage.	do.	21	384	1	1882	4,000.00	4,000.00	-----
Contingent expenses.	do.	21	384	1	1882	10,000.00	10,000.00	-----
Building for display of agricultural implements.	do.	21	385	1	1882	10,000.00	10,000.00	-----
Experiments in the manufacture of sugar (including \$864.60 from sale of molasses, etc.).	do.	21	384	1	1882	35,864.60	32,333.75	(b)
Transportation of specimens from Atlanta.	Feb. 13, 1882	22	3	1	1882	5,000.00	4,998.91	1.09
Salaries.	May 19, 1882	22	89	1	1883	102,580.00	102,575.49	4.51
Collecting agricultural statistics.	do.	22	90	1	1883	80,000.00	78,170.80	1,829.20
Laboratory.	do.	22	90	1	1883	6,000.00	6,000.00	-----
Purchase and distribution of seeds, etc.	do.	22	90	1	1883	80,000.00	80,000.00	-----
Experiments in the culture, etc., of tea.	do.	22	91	1	1883	5,000.00	3,905.66	1,094.34
Experimental garden and grounds.	do.	22	91	1	1883	15,500.00	15,471.82	28.18
Museum.	do.	22	92	1	1883	1,000.00	1,000.00	-----
Furniture, cases, and repairs.	do.	22	91	1	1883	6,700.00	6,700.00	-----
Library.	do.	22	91	1	1883	1,500.00	1,485.32	14.68
Investigating the history and habits of insects.	do.	22	91	1	1883	20,000.00	19,997.75	2.25
Examination of fibers.	do.	22	91	1	1883	10,000.00	7,961.94	2,038.06
Investigating the diseases of domestic animals.	do.	22	92	1	1883	25,000.00	21,584.28	3,415.72
Reclamation of arid lands, including an unexpended balance of \$85.26 from fiscal year 1882.	do.	22	92	1	1883	20,085.26	12,429.13	(c)
Report on forestry.	do.	22	92	1	1883	10,000.00	8,731.99	1,268.01
Postage.	do.	22	92	1	1883	4,000.00	3,977.49	22.51
Contingent expenses.	do.	22	92	1	1883	15,000.00	14,920.74	79.26
Experiments in the manufacture of sugar, including an unexpended balance of \$3,530.85 from fiscal year 1882.	do.	22	92	1	1883	28,530.85	28,529.31	1.54
Erection of building for seed division.	Aug. 7, 1882	22	306	1	1883	25,000.00	25,000.00	-----
Report on the Angora goat.	do.	22	337	1	1883	500.00	500.00	-----
Salaries.	Jan. 20, 1883	22	408	1	1884	127,640.00	127,639.87	.13
Collecting agricultural statistics.	do.	22	410	1	1884	80,000.00	79,770.86	229.14
Laboratory, and for experiments in the manufacture of sugar, including \$842.18 from the sale of sirup, etc.	do.	22	410	1	1884	16,842.18	16,829.26	12.92

a Unexpended balance of \$85.26 carried to fiscal year 1883.

b Unexpended balance of \$3,530.85 carried to fiscal year 1883.

c Unexpended balance of \$7,656.13 carried to fiscal year 1884.



## Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Purchase and distribution of seeds, etc.	Jan. 20, 1883	22	410	1	1884	\$75,000.00	\$74,986.48	\$13.52
Experimental gardens and grounds.	do	22	409	1	1884	15,500.00	15,448.87	51.13
Museum.	do	22	411	1	1884	1,000.00	993.51	6.49
Furniture, cases, and repairs.	do	22	409	1	1884	6,000.00	5,998.82	1.18
Library.	do	22	411	1	1884	1,500.00	1,439.86	60.14
Investigating the history and habits of insects.	do	22	409	1	1884	20,002.82	20,002.82	.....
Reclamation of arid lands, including an unexpended balance of \$7,656.13 from fiscal year 1883.	Aug. 4, 1886	24	273	1	1884			
Investigating the diseases of domestic animals.	Jan. 20, 1883	22	411	1	1884	17,656.13	16,164.68	1,491.45
Report on forestry.	do	22	411	1	1884	25,000.00	24,011.85	988.15
Postage.	do	22	411	1	1884	10,000.00	9,998.30	1.70
Contingent expenses.	do	22	411	1	1884	4,000.00	3,841.48	158.52
Building of greenhouse.	do	22	411	1	1884	14,000.00	13,991.43	8.57
Salaries.	do	22	631	1	1884	2,500.00	2,500.00	.....
Collecting agricultural statistics.	June 5, 1884	23	36	1	1885	137,590.00	137,557.80	32.20
Bureau of Animal Industry.	do	23	38	1	1885	100,000.00	99,986.59	13.41
Purchase and distribution of seeds, etc.	May 29, 1884	23	31	1	1885	150,000.00	56,807.73	(a)
Laboratory, and for experiments in the manufacture of sugar.	June 5, 1884	23	38	1	1885	100,000.00	99,983.82	16.18
Investigating the history and habits of insects.	do	23	38	1	1885	50,000.00	49,996.70	3.30
Silk culture.	do	23	37	1	1885	20,000.00	19,986.83	13.17
Contingent expenses.	do	23	39	1	1885	15,000.00	14,916.23	83.77
Report on forestry.	do	23	39	1	1885	15,000.00	14,862.20	137.80
Experimental garden and grounds.	do	23	39	1	1885	10,000.00	9,987.36	12.64
Furniture, cases, and repairs.	do	23	37	1	1885	17,840.25	17,513.67	326.58
Postage.	Oct. 19, 1888	25	581	1	1885	6,000.00	5,947.27	52.73
Experiments in the culture, etc., of tea.	June 5, 1884	23	38	1	1885	4,000.00	3,956.98	43.02
Library.	do	23	39	1	1885	3,000.00	2,998.90	1.10
Museum.	do	23	39	1	1885	1,500.00	1,403.63	96.37
Quarantine stations.	do	23	37	1	1885	1,000.00	1,000.00	.....
Salaries.	June 7, 1884	23	207	1	1885	25,000.00	22,029.18	(b)
Collecting agricultural statistics.	Mar. 3, 1885	23	353	1	1886	137,590.00	137,337.42	252.58
Bureau of Animal Industry, including an unexpended balance of \$93,192.27 from fiscal year 1885.	do	23	355	1	1886	75,000.00	68,723.06	6,276.94
Quarantine stations, including an unexpended balance of \$2,970.82 for fiscal year 1885.	do	23	355	1	1886	193,192.27	58,261.05	134,931.22
Purchase and distribution of seeds, etc.	do	23	356	1	1886	32,970.82	18,958.57	14,012.25
Laboratory, and for experiments in the manufacture of sugar.	do	23	354	1	1886	100,000.00	99,980.24	19.76
Investigating the history and habits of insects.	do	23	354	1	1886	40,000.00	39,942.11	57.89
Silk culture.	do	23	354	1	1886	25,000.00	24,976.46	23.54
Contingent expenses.	do	23	356	1	1886	15,012.00	15,008.50	3.50
Report on forestry.	Oct. 19, 1888	25	581	1	1886	15,000.00	14,937.62	62.38
Experimental garden and grounds.	Mar. 3, 1885	23	356	1	1886	10,000.00	9,836.83	163.17
Furniture, cases, and repairs.	do	23	254	1	1886	17,208.13	17,024.88	183.25
Postage.	Aug. 4, 1886	24	273	1	1886	7,500.00	7,423.59	76.41
Experiments in the culture, etc., of tea.	Oct. 19, 1888	25	581	1	1886	4,000.00	2,556.20	1,443.80
Library.	do	23	356	1	1886	3,000.00	1,813.67	1,186.33
Museum.	do	23	355	1	1886	1,500.00	1,417.03	82.97
Salaries.	do	23	354	1	1886	1,000.00	998.88	1.12
	June 30, 1886	24	100	1	1887	142,890.00	141,420.68	1,469.32

a Unexpended balance of \$93,192.27 carried to fiscal year 1886.

b Unexpended balance of \$2,970.82 carried to fiscal year 1886.

## 78 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Collecting agricultural statistics.....	June 30, 1886	24	103	1	1887	\$65,000.00	\$64,955.14	\$44.86
Bureau of Animal Industry.....	do	24	103	1	1887	100,000.00	99,985.56	14.44
Quarantine stations.....	do	24	103	1	1887	30,000.00	10,639.44	19,360.56
Purchase and distribution of seeds, etc.....	do	24	102	1	1887	100,000.00	99,998.37	1.63
Laboratory.....	do	24	101	1	1887	6,000.00	4,570.86	1,429.14
Experiments in the manufacture of sugar, including \$1,891 from sales.....	do	24	101	1	1887	95,891.00	95,853.14	37.86
Investigating the history and habits of insects.....	do	24	101	1	1887	15,096.25	15,083.05	8.20
Silk culture, including \$864.81 from sale of raw silk.....	Oct. 19, 1888	25	582	1	1887	15,939.56	15,939.56	.....
Contingent expenses.....	June 30, 1886	24	101	1	1887	15,000.00	14,936.83	63.17
Report on forestry.....	do	24	104	1	1887	8,000.00	7,953.50	46.50
Experimental garden and grounds.....	do	24	103	1	1887	23,200.00	22,202.15	997.85
Furniture, cases, and repairs.....	do	24	103	1	1887	8,125.00	8,092.11	32.89
Postage.....	do	24	104	1	1887	4,000.00	3,500.00	500.00
Experiments in the culture, etc., of tea.....	do	24	104	1	1887	2,000.00	1,753.78	246.22
Pomological information.....	do	24	100	1	1887	3,000.00	2,993.20	6.80
Library.....	do	24	103	1	1887	1,500.00	1,428.65	71.35
Botanical investigations.....	do	24	100	1	1887	5,000.00	4,988.12	11.88
Museum.....	do	24	102	1	1887	1,000.00	998.88	1.12
Ornithology and mammalogy.....	do	24	101	1	1887	10,000.00	9,999.98	.02
Reclamation of arid lands.....	do	24	103	1	1887	5,000.00	.....	5,000.00
Adulteration of food.....	do	24	100	1	1887	1,000.00	999.14	10.86
Salaries.....	Mar. 3, 1887	24	495	1	1888	161,490.00	158,220.87	3,269.13
Collecting agricultural statistics.....	do	24	498	1	1888	65,000.00	64,965.33	34.67
Bureau of Animal Industry, including \$100,000 immediately available.....	do	24	499	1	1888	500,000.00	499,975.32	24.68
Quarantine stations.....	do	24	499	1	1888	20,000.00	9,538.75	10,461.25
Purchase and distribution of seeds, etc.....	do	24	498	1	1888	103,000.00	102,587.55	412.45
Laboratory.....	do	24	497	1	1888	6,000.00	5,969.89	30.11
Experiments in the manufacture of sugar.....	do	24	497	1	1888	50,000.00	49,997.43	2.57
Experiments in the manufacture of sugar (deficiency).....	Oct. 19, 1888	25	582	1	1887 } 1888 }	8,000.00	7,927.50	72.50
Investigating the history and habits of insects.....	Mar. 3, 1887	24	497	1	1888	20,000.00	20,000.00	.....
Silk culture, including \$1,989.06 from sale of raw silk.....	do	24	497	1	1888	16,989.06	16,989.02	.04
Contingent expenses.....	do	24	499	1	1888	15,000.00	14,825.57	174.43
Report on forestry.....	do	24	499	1	1888	8,000.00	7,996.10	3.90
Experimental garden and grounds.....	do	24	497	1	1888	24,800.00	24,706.86	93.14
Furniture, cases, and repairs.....	do	24	498	1	1888	7,000.00	6,882.88	17.12
Postage.....	do	24	499	1	1888	4,000.00	3,000.00	1,000.00
Pomological information.....	do	24	497	1	1888	3,000.00	2,971.99	28.31
Library.....	do	24	499	1	1888	2,000.00	1,983.78	16.22
Botanical investigations.....	do	24	496	1	1888	7,000.00	6,997.28	2.72
Museum.....	do	24	497	1	1888	1,000.00	997.41	52.59
Ornithology and mammalogy.....	do	24	497	1	1888	3,940.00	3,898.23	70.77
Adulteration of food.....	do	24	497	1	1888	1,000.00	830.16	169.84
Salaries.....	July 18, 1888	25	328	1	1889	171,890.32	169,152.51	2,737.81
Collecting agricultural statistics.....	Mar. 2, 1889	25	923	1	1889	70,000.00	69,162.45	837.55
Botanical investigations.....	do	25	330	1	1889	35,000.00	22,078.75	(*)
Investigating the history and habits of insects.....	do	25	331	1	1889	20,131.64	20,131.64	.....
Ornithology and mammalogy.....	Sept. 30, 1890	26	525	1	1889	5,025.90	5,022.06	3.84
Pomological information.....	July 18, 1888	25	332	1	1889	4,024.48	4,020.32	4.16
Microscopical investigations.....	Mar. 2, 1889	25	838	1	1889	1,000.00	999.87	.13
Laboratory.....	do	25	330	1	1889	11,000.00	9,994.25	1,005.75
	Mar. 2, 1889	25	837	1	1889			

\* Unexpended balance of \$12,923.25 carried to fiscal year 1890.

## Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Forestry investigations.....	July 18, 1888	25	333	1	1889	\$8,000.00	\$7,999.03	\$0.97
Purchase and distribution of seeds.....	do.....	25	332	1	1889	104,200.00	104,168.73	31.27
Experimental gardens and grounds.....	do.....	25	332	1	1889	26,640.00	26,639.83	.17
Museum.....	do.....	25	332	1	1889	1,000.00	891.25	108.75
Furniture, cases, and repairs.....	do.....	25	333	1	1889	7,350.00	7,236.74	113.26
Library.....	do.....	25	333	1	1889	2,000.00	1,956.34	43.66
Postage.....	do.....	25	333	1	1889	4,000.00	4,000.00	.....
Contingent expenses.....	do.....	25	333	1	1889	15,010.00	15,009.22	.78
Office of Experiment Stations.....	Mar. 3, 1891	26	881	1	1889	10,000.00	9,033.77	966.23
Experiments in the manufacture of sugar.....	July 18, 1888	25	334	1	1889	10,000.00		
Quarantine stations.....	do.....	25	333	1	1889	100,000.00	41,635.24	(a)
Bureau of Animal Industry.....	do.....	25	333	1	1889	15,000.00	11,628.39	3,371.61
Silk culture, including \$708.26 from sale of raw silk.....	do.....	25	333	1	1889	500,000.00	479,623.57	20,376.43
Salaries.....	do.....	25	331	1	1889	23,208.26	23,208.26	.....
Collecting agricultural statistics.....	Mar. 2, 1889	25	835	1	1890	178,580.00	175,547.04	3,032.96
Botanical investigations, including an unexpended balance of \$12,923.25 from fiscal year 1889.....	do.....	25	839	1	1890	75,000.00	74,327.51	672.49
Investigating the history and habits of insects.....	do.....	25	836	1	1890	48,009.25	47,990.38	18.87
Ornithology and mammalogy.....	July 28, 1892	27	296	1	1890	20,000.00	19,892.72	107.28
Pomological information.....	Mar. 2, 1889	25	838	1	1890	7,000.00	6,994.16	5.84
Microscopical investigations.....	July 14, 1890	26	285	1	1890	4,304.79	4,304.79	.....
Laboratory.....	Mar. 2, 1889	25	837	1	1890	1,062.50	1,062.50	.....
Forestry investigations.....	Mar. 3, 1891	26	881	1	1890	6,000.00	5,461.99	538.01
Purchase and distribution of seeds.....	Mar. 2, 1889	25	837	1	1890	8,000.00	7,999.96	.04
Experimental garden and grounds.....	do.....	25	839	1	1890	104,200.00	104,174.55	25.45
Museum.....	do.....	25	838	1	1890	26,640.00	26,478.45	161.55
Furniture, cases, and repairs.....	do.....	25	838	1	1890	1,000.00	998.39	1.61
Library.....	do.....	25	839	1	1890	9,350.00	9,261.93	88.07
Postage.....	Apr. 4, 1890	26	42	1	1890	2,000.00	1,738.28	261.72
Contingent expenses.....	Mar. 2, 1889	25	840	1	1890	4,000.00	4,000.00	.....
Office of Experiment Stations.....	do.....	25	840	1	1890	20,000.00	19,965.32	34.68
Experiments in the manufacture of sugar, including an unexpended balance of \$58,364.76 from fiscal year 1889.....	Apr. 4, 1890	26	42	1	1890	15,000.00	14,991.69	8.31
Quarantine stations.....	Mar. 2, 1889	25	840	1	1890	83,364.76	83,064.14	300.62
Bureau of Animal Industry.....	do.....	25	840	1	1890	15,000.00	11,266.24	3,733.76
Silk culture, including \$1,627.81 from sale of raw silk.....	do.....	25	839	1	1890	500,000.00	311,025.31	(b)
Artesian wells.....	do.....	25	837	1	1890	21,627.81	21,626.10	1.71
Salaries.....	Apr. 4, 1890	26	42	1	1890	20,000.00	19,652.17	347.83
Collecting agricultural statistics.....	July 14, 1890	26	282	1	1891	248,902.85	239,923.29	8,979.56
Botanical investigations.....	do.....	26	284	1	1891	100,000.00	85,126.44	14,873.56
Investigating the history and habits of insects.....	do.....	26	284	1	1891	40,000.00	36,428.36	3,571.64
Ornithology and mammalogy.....	do.....	26	285	1	1891	27,501.77	27,481.00	20.77
Pomological information.....	July 28, 1892	27	296	1	1891	14,004.90	13,003.67	1,001.23
Microscopical investigations.....	July 14, 1890	26	285	1	1891	5,000.00	4,983.88	16.12
Vegetable pathology.....	July 28, 1892	27	296	1	1891	5,000.00	3,281.90	1,718.10
Laboratory.....	do.....	26	285	1	1891	15,000.00	14,995.75	4.25
Forestry investigations.....	do.....	26	286	1	1891	20,200.00	19,985.27	214.73
Illustrations and engravings.....	do.....	26	286	1	1891	10,000.00	9,785.99	214.01
Purchase and distribution of seeds.....	do.....	26	286	1	1891	2,000.00	1,999.58	.42
	do.....	26	286	1	1891	105,400.00	105,090.94	309.06

a Unexpended balance of \$58,364.76 carried to fiscal year 1890.

b Unexpended balance of \$188,974.60 carried to fiscal year 1891.

## 80 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Document and folding room.....	July 14, 1890	26	287	1	1891	\$2,000.00	\$1,995.53	\$4.47
Experimental garden and grounds.....	do.....	26	287	1	1891	28,500.00	28,396.41	103.59
Museum.....	do.....	26	287	1	1891	4,000.00	3,832.28	167.72
Furniture, cases, and repairs.....	do.....	26	287	1	1891	12,000.00	11,991.01	8.99
Library.....	Mar. 3, 1891	26	1049	1	1891	3,000.00	2,997.20	2.80
Postage.....	July 14, 1890	26	287	1	1891	5,000.00	4,833.00	167.00
Contingent expenses.....	do.....	26	287	1	1891	20,000.00	18,097.13	1,902.87
Office of Experiment Stations.....	do.....	26	288	1	1891	15,000.00	14,984.48	15.52
Experiments in the manufacture of sugar.....	do.....	26	288	1	1891	75,000.00	74,901.18	98.82
Irrigation investigations.....	Mar. 3, 1891	26	1050	1	1891	40,000.00	39,926.67	73.33
Quarantine stations.....	Sept. 30, 1890	26	525	1	1891	15,000.00	13,586.72	1,413.28
Bureau of Animal Industry, including an unexpended balance of \$188,974.69 from fiscal year 1890.....	July 14, 1890	26	288	1	1891			
.....do.....	do.....	26	287	1	1891	538,974.69	469,113.35	69,861.34
Silk culture, including \$565 from sale of raw silk.....	do.....	26	285	1	1891	20,565.00	19,536.33	1,028.67
Salaries.....	Mar. 3, 1891	26	1045	1	1892	256,800.00	252,766.17	4,033.83
Collecting agricultural statistics.....	do.....	26	1046	1	1892	102,500.00	88,809.51	13,690.49
Botanical investigations.....	do.....	26	1046	1	1892	40,246.40	40,246.40	.....
Investigating the history and habits of insects.....	Aug. 23, 1894	28	440	1	1892			
Ornithology and mammalogy.....	Mar. 3, 1891	26	1047	1	1892	27,800.00	27,780.03	19.97
Pomological information.....	do.....	26	1047	1	1892	15,000.00	14,688.00	312.00
Microscopical investigations.....	do.....	26	1047	1	1892	5,000.00	4,985.27	14.73
Vegetable pathology.....	do.....	26	1047	1	1892	2,000.00	1,251.46	748.54
Laboratory.....	Aug. 23, 1894	28	440	1	1892	15,076.47	15,076.47	.....
Fiber investigations.....	Mar. 3, 1891	26	1047	1	1892	19,400.00	19,272.59	127.41
Forestry investigations.....	do.....	26	1048	1	1892	10,000.00	8,017.44	1,982.56
Illustrations and engravings.....	do.....	26	1048	1	1892	15,056.85	15,056.85	.....
Purchase and distribution of seeds.....	Mar. 3, 1893	27	660	1	1892	2,000.00	1,999.85	.15
Document and folding room.....	do.....	26	1048	1	1892	105,400.00	104,920.35	479.65
Experimental garden and grounds.....	do.....	26	1049	1	1892	2,000.00	1,996.82	3.18
Museum.....	do.....	26	1049	1	1892	28,622.53	28,536.67	85.86
Furniture, cases, and repairs.....	Mar. 3, 1893	27	660	1	1892	4,000.00	3,909.17	90.83
Library.....	Mar. 3, 1891	26	1049	1	1892	10,000.00	9,996.55	3.45
Postage.....	do.....	26	1049	1	1892	3,000.00	2,807.75	192.25
Contingent expenses.....	do.....	26	1049	1	1892	5,000.00	4,900.00	100.00
Office of Experiment Stations.....	do.....	26	1049	1	1892	25,000.00	24,762.32	237.68
Experiments in the manufacture of sugar.....	do.....	26	1050	1	1892	20,000.00	19,989.47	10.53
Quarantine stations.....	do.....	26	1050	1	1892	35,000.00	34,627.78	372.22
Bureau of Animal Industry.....	Mar. 18, 1892	27	7	1	1892	15,000.00	14,983.63	16.37
Weather Bureau.....	Mar. 3, 1891	26	1050	1	1892	650,000.00	649,980.91	19.09
Salaries.....	do.....	26	1045	1	1892	889,753.50	861,840.83	27,912.67
Collecting agricultural statistics.....	July 5, 1892	27	74	1	1893	256,800.00	253,896.30	2,903.70
Botanical investigations and experiments.....	do.....	27	76	1	1893	110,000.00	95,649.21	14,350.79
Investigating the history and habits of insects.....	do.....	27	76	1	1893	27,500.00	27,451.55	48.45
Investigations in ornithology and mammalogy.....	do.....	27	77	1	1893	17,800.00	17,290.80	509.20
Pomological information.....	do.....	27	77	1	1893	15,000.00	14,947.77	52.23
Microscopical investigations.....	do.....	27	77	1	1893	5,000.00	4,745.94	254.06
Vegetable pathology.....	do.....	27	77	1	1893	2,000.00	1,982.98	17.02
Laboratory.....	do.....	27	77	1	1893	20,000.00	19,977.38	22.62
Fiber investigations.....	do.....	27	77	1	1893	19,400.00	18,002.59	1,397.41
Forest investigations.....	do.....	27	78	1	1893	5,000.00	4,997.07	2.93
Illustrations and engravings.....	do.....	27	78	1	1893	12,000.00	11,933.39	66.61
Purchase and distribution of seeds.....	do.....	27	78	1	1893	2,000.00	1,906.73	93.27
Document and folding room.....	do.....	27	78	1	1893	135,400.00	134,908.27	491.73
Experimental garden and grounds.....	do.....	27	78	1	1893	2,000.00	1,623.55	376.45
Museum.....	do.....	27	78	1	1893	28,500.00	28,115.09	384.91
.....do.....	do.....	27	79	1	1893	4,000.00	3,973.67	26.33

*Statement of appropriations, disbursements, and unexpended balances for the United States  
Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Furniture, cases, and repairs ..	July 5, 1892	27	79	1	1893	\$10,000.00	\$8,931.97	\$1,068.03
Library .....	do.	27	79	1	1893	3,000.00	2,535.29	464.71
Postage .....	do.	27	79	1	1893	5,000.00	3,705.00	1,295.00
Contingent expenses .....	do.	27	79	1	1893	25,000.00	22,218.19	2,781.81
Experiment stations .....	do.	27	80	1	1893	20,000.00	18,987.65	1,012.35
Experiments in the manufacture of sugar .....	do.	27	80	1	1893	20,000.00	19,984.86	15.14
Irrigation investigations .....	do.	27	76	1	1893	6,000.00	4,930.67	1,069.33
Quarantine stations .....	do.	27	80	1	1893	15,000.00	12,633.23	2,366.77
Experiments in the production of rainfall .....	do.	27	76	1	1893	10,000.00	4,979.59	5,020.41
Bureau of Animal Industry ..	do.	27	79	1	1893	850,000.00	724,606.74	125,393.26
Weather Bureau .....	do.	27	81	1	1893	913,660.72	890,424.77	23,235.95
Salaries .....	Mar. 3, 1893	27	734	1	1894	256,800.00	233,679.75	23,120.25
Collecting agricultural statistics .....	do.	27	736	1	1894	110,000.00	91,080.20	18,919.80
Botanical investigations and experiments .....	do.	27	737					
Investigating the history and habits of insects .....	do.	27	737	1	1894	30,000.00	24,401.40	5,598.60
Investigations in ornithology and mammalogy .....	do.	27	737	1	1894	20,300.00	16,203.96	4,096.04
Pomological information .....	do.	27	738	1	1894	17,500.00	17,450.00	50.00
Microscopical investigations .....	do.	27	738	1	1894	5,000.00	4,248.99	751.01
Vegetable pathology .....	do.	27	738	1	1894	2,000.00	1,117.55	882.45
Laboratory .....	do.	27	738	1	1894	20,000.00	17,576.95	2,423.05
Fiber investigations .....	do.	27	738	1	1894	21,900.00	10,426.79	11,473.21
Forestry investigations .....	do.	27	738	1	1894	5,000.00	2,500.47	2,499.53
Illustrations and engravings ..	do.	27	738	1	1894	20,000.00	19,995.96	4.04
Purchase and distribution of seeds .....	do.	27	738	1	1894	2,000.00	664.79	1,335.21
Document and folding room .....	do.	27	739	1	1894	135,400.00	119,719.76	15,680.24
Experimental garden and grounds .....	do.	27	739	1	1894	2,000.00	1,662.81	337.19
Museum .....	do.	27	739	1	1894	31,500.00	26,616.86	4,883.14
Furniture, cases, and repairs ..	do.	27	739	1	1894	4,000.00	2,787.22	1,212.78
Library .....	do.	27	739	1	1894	10,000.00	8,628.76	1,371.24
Postage .....	do.	27	739	1	1894	3,000.00	2,900.07	99.93
Contingent expenses .....	do.	27	740	1	1894	5,000.00	1,375.00	3,625.00
Experiment stations .....	do.	27	740	1	1894	25,000.00	20,493.04	4,506.96
Inquiries relating to public roads .....	do.	27	740	1	1894	25,223.50	22,381.85	2,841.65
Experiments in the manufacture of sugar .....	do.	27	737	1	1894	10,000.00	2,997.39	7,002.61
Irrigation investigations .....	do.	27	741	1	1894	20,107.33	9,451.80	10,655.53
Quarantine stations .....	do.	27	741	1	1894	6,000.00	5,475.92	524.08
Bureau of Animal Industry .....	do.	27	740	1	1894	15,000.00	6,263.92	8,736.08
Weather Bureau .....	do.	27	740	1	1894	850,000.00	496,111.34	353,888.66
Salaries .....	Aug. 18, 1894	27	741	1	1894	951,124.75	811,256.73	139,868.02
Collecting agricultural statistics .....	do.	28	266	1	1895	249,876.16	204,589.72	45,286.44
Botanical investigations and experiments .....	do.	28	266	1	1895	110,000.00	95,125.67	14,874.33
Investigating the history and habits of insects .....	do.	28	267	1	1895	30,000.00	25,695.30	4,304.70
Investigations in ornithology, etc. ....	do.	28	267	1	1895	20,300.00	16,822.87	3,477.13
Pomological information .....	do.	28	267	1	1895	17,500.00	15,526.35	1,973.65
Microscopical investigations .....	do.	28	267	1	1895	5,000.00	4,920.23	79.77
Vegetable pathological investigations, etc. ....	do.	28	267	1	1895	2,000.00	313.87	1,686.13
Laboratory .....	do.	28	267	1	1895	20,000.00	19,063.69	936.31
Fiber investigations .....	do.	28	267	1	1895	14,900.00	11,010.50	3,889.50
Report on forestry .....	do.	28	271	1	1895	5,000.00	3,973.81	1,026.19
Illustrations and engravings ..	do.	28	268	1	1895	20,000.00	19,908.23	91.77
Purchase and distribution of valuable seeds .....	do.	28	268	1	1895	15,000.00	9,114.71	5,885.29
Document and folding room .....	do.	28	269	1	1895	165,400.00	120,545.15	44,854.85
Experimental gardens and grounds .....	do.	28	268	1	1895	2,000.00	1,166.83	833.17
Museum .....	do.	28	268	1	1895	29,500.00	23,578.11	5,921.89
Furniture, cases, and repairs ..	do.	28	271	1	1895	3,000.00	1,889.73	1,110.27
Library .....	do.	28	271	1	1895	10,000.00	7,952.27	2,047.73
Postage .....	do.	28	272	1	1895	6,000.00	5,963.20	36.80
Nutrition investigations .....	do.	28	271	1	1895	5,000.00	765.00	4,235.00
Contingent expenses .....	do.	28	271	1	1895	10,000.00	9,746.30	253.70
	do.	28	272	1	1895	25,000.00	20,452.79	4,547.21

## 82 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Agricultural experiment stations	Aug. 18, 1894	28	271	1	1895	\$25,000.00	\$24,928.22	\$71.78
Inquiries relating to public roads	do	28	266	1	1895	10,000.00	6,901.66	3,098.34
Experiments in the manufacture of sugar	do	28	271	1	1895	10,000.00	6,188.80	3,811.20
Irrigation investigations	do	28	271	1	1895	6,000.00	3,904.88	2,095.12
Quarantine stations for neat cattle	do	28	269	1	1895	12,000.00	6,262.17	5,737.83
Bureau of Animal Industry	do	28	269	1	1895	800,000.00	534,028.38	265,971.62
Weather Bureau	do	28	272	1	1895	878,438.84	820,691.94	57,746.90
Salaries	Mar. 2, 1895	28	727	1	1896	252,840.00	217,066.97	35,773.03
Collecting agricultural statistics	do	28	729	1	1896	110,000.00	68,628.99	41,371.01
Inquiries relating to public roads	do	28	729	1	1896	10,000.00	9,568.39	431.61
Botanical investigations and experiments	do	28	730	1	1896	25,000.00	20,325.37	4,674.63
Investigating the history and habits of insects	do	28	730	1	1896	20,000.00	17,372.43	2,627.57
Investigations in ornithology and mammalogy	do	28	730	1	1896	17,500.00	16,175.45	1,324.55
Pomological information	do	28	730	1	1896	6,000.00	4,996.41	1,003.59
Microscopical investigations	do	28	730	1	1896	2,000.00		2,000.00
Vegetable pathological investigations and experiments	do	28	730	1	1896	20,000.00	18,539.18	1,460.82
Laboratory	do	28	730	1	1896	14,900.00	11,458.53	3,441.47
Report on forestry	do	28	731	1	1896	25,000.00	18,398.12	6,601.88
Illustrations and engravings	do	28	731	1	1896	15,000.00	12,985.71	2,014.29
Document and folding room	do	28	731	1	1896	2,000.00	1,061.23	938.77
Experimental gardens and grounds	do	28	731	1	1896	29,500.00	22,371.15	7,128.85
Quarantine stations for neat cattle	do	28	733	1	1896	12,000.00	6,492.05	5,507.95
Purchase and distribution of valuable seeds	do	28	733	1	1896	185,400.00	126,476.87	58,923.13
Experiments in the manufacture of sugar	do	28	734	1	1896	10,000.00	1,510.94	8,489.06
Agricultural experiment stations (\$750,000 c)	do	28	734	1	1896	b 30,143.75	27,712.86	2,430.89
Irrigation investigations	do	28	735	1	1896	15,000.00	5,029.82	9,970.18
Nutrition investigations	do	28	735	1	1896	15,000.00	14,892.96	107.04
Investigations and experiments with grasses and forage plants	do	28	735	1	1896	15,000.00	13,329.47	1,670.53
Investigations in relation to agricultural soils	do	28	735	1	1896	15,000.00	13,524.84	1,475.16
Furniture, cases, and repairs	do	28	735	1	1896	10,000.00	8,645.98	1,354.02
Postage	do	28	735	1	1896	2,000.00	1,215.00	785.00
Museum	do	28	735	1	1896	3,000.00	2,161.90	838.10
Fiber investigations	do	28	735	1	1896	5,000.00	3,710.36	1,289.64
Library	do	28	735	1	1896	6,000.00	5,431.92	568.08
Contingent expenses	do	28	736	1	1896	25,000.00	15,912.71	9,087.29
Bureau of Animal Industry	do	28	731	1	1896	800,000.00	595,336.64	204,663.36
Weather Bureau	do	28	736	1	1896	c 885,729.47	814,584.17	71,145.30
Salaries	Apr. 25, 1896	29	99	1	1897	313,860.00	290,791.95	23,068.05
Furniture, cases, and repairs	do	29	105	1	1897	12,000.00	9,567.59	2,432.41
Library	do	29	104	1	1897	7,000.00	6,831.15	168.85
Museum	do	29	105	1	1897	3,000.00	2,895.45	104.55
Postage	do	29	105	1	1897	3,000.00	1,730.00	1,270.00
Contingent expenses	do	29	105	1	1897	25,000.00	22,980.29	2,019.71
Animal quarantine stations	do	29	105	1	1897	12,000.00	6,564.19	5,435.81
Collecting agricultural statistics	do	29	101	1	1897	110,000.00	83,067.62	26,932.38
Botanical investigations and experiments	do	29	101	1	1897	15,000.00	14,999.64	36
Entomological investigations	do	29	102	1	1897	20,000.00	18,637.01	1,362.99
Vegetable pathological investigations	do	29	102	1	1897	20,000.00	19,274.15	725.85
Biological investigations	do	29	102	1	1897	17,500.00	17,483.05	16.95
Pomological investigations	do	29	102	1	1897	6,000.00	4,981.52	1,018.48

a Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

b Includes \$143.75 from the sale of card index.

c Includes \$119.47 from the sale of Weather Bureau publications.

# APPROPRIATIONS AND DISBURSEMENTS.

83

Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Laboratory.....	Apr. 25, 1896	29	102	1	1897	\$12,400.00	\$10,800.18	\$1,599.82
Forestry investigations.....	do.....	29	103	1	1897	20,000.00	19,514.88	485.12
Experimental gardens and grounds.....	do.....	29	103	1	1897	20,000.00	19,483.28	516.72
Soil investigations.....	do.....	29	103	1	1897	10,000.00	9,868.18	131.84
Grass and forage plant investigations.....	do.....	29	103	1	1837	10,000.00	9,203.14	796.86
Fiber investigations.....	do.....	29	103	1	1897	5,000.00	4,143.00	857.00
Agricultural experiment stations (\$750,000 <sup>a</sup> ).....	do.....	29	103	1	1897	b 30,127.25	29,171.57	955.68
Nutrition investigations.....	do.....	29	104	1	1897	15,000.00	14,821.64	178.36
Public road inquiries.....	do.....	29	104	1	1897	8,000.00	7,873.97	126.03
Publications.....	do.....	29	104	1	1897	70,000.00	67,709.89	2,290.11
Purchase and distribution of valuable seeds.....	do.....	29	106	1	1897	150,000.00	142,822.52	7,177.48
Bureau of Animal Industry.....	do.....	29	106	1	1897	650,000.00	642,715.68	7,284.32
Weather Bureau.....	do.....	29	107	1	1897	c 883,876.28	870,581.46	13,294.82
Salaries, officers and clerks.....	Apr. 23, 1897	30	1	1	1898	319,300.00	285,181.30	5,118.70
Furniture, cases, and repairs.....	do.....	30	8	1	1898	9,000.00	18,962.88	37.02
Library.....	do.....	30	7	1	1898	7,000.00	9,511.02	188.98
Museum.....	do.....	30	8	1	1898	3,000.00	7,851.30	1,148.70
Postage.....	do.....	30	8	1	1898	3,000.00	6,734.81	265.19
Contingent expenses.....	do.....	30	8	1	1898	25,000.00	2,906.02	93.98
Animal quarantine stations.....	do.....	30	7	1	1898	12,000.00	1,500.00	1,500.00
Collecting agricultural statistics.....	do.....	30	3	1	1898	110,000.00	22,061.73	2,938.27
Botanical investigations and experiments.....	do.....	30	4	1	1898	15,000.00	10,897.98	1,102.02
Entomological investigations.....	do.....	30	4	1	1898	20,000.00	92,896.01	7,103.99
Vegetable pathological investigations.....	do.....	30	4	1	1898	20,000.00	9,021.09	978.91
Biological investigations.....	do.....	30	4	1	1898	17,500.00	14,714.50	285.50
Pomological investigations.....	do.....	30	4	1	1898	8,000.00	19,735.02	264.98
Laboratory.....	do.....	30	5	1	1898	12,400.00	18,966.67	373.33
Forestry investigations.....	do.....	30	5	1	1898	20,000.00	660.00	.....
Experimental gardens and grounds.....	do.....	30	5	1	1898	25,000.00	16,160.90	1,339.10
Soil investigations.....	do.....	30	5	1	1898	10,000.00	7,487.93	512.07
Grass and forage plant investigations.....	do.....	30	5	1	1898	10,000.00	3,913.86	86.14
Fiber investigations.....	do.....	30	6	1	1898	10,000.00	900.00	.....
Agricultural experiment stations (\$755,000 <sup>a</sup> ).....	do.....	30	6	1	1898	35,000.00	6,718.71	781.29
Nutrition investigations.....	do.....	30	6	1	1898	15,000.00	19,831.32	168.68
Public road inquiries.....	do.....	30	7	1	1898	8,000.00	24,937.31	62.69
Publications, including Farmers' Bulletins.....	do.....	30	7	1	1898	65,000.00	9,199.82	140.18
Investigating production of domestic sugar.....	do.....	30	39	1	1898	5,000.00	660.00	.....
Purchase and distribution of valuable seeds.....	do.....	30	8	1	1898	130,000.00	8,877.68	1,122.32
Salaries and expenses, Bureau of Animal Industry.....	do.....	30	9	1	1898	675,000.00	3,659.05	1,340.95
Weather Bureau.....	do.....	30	9	1	1898	883,702.00	29,413.10	586.90
Salaries, officers and clerks.....	Mar. 22, 1898	30	330	1	1899	319,300.00	4,925.80	74.20
Furniture, cases, and repairs.....	do.....	30	336	1	1899	9,000.00	14,872.88	127.12
Library.....	do.....	30	336	1	1899	6,000.00	7,978.44	21.56
Museum.....	do.....	30	336	1	1899	1,500.00	34,966.55	33.45
Postage.....	do.....	30	336	1	1899	2,000.00	29,812.59	187.41
Contingent expenses.....	do.....	30	337	1	1899	25,000.00	2,000.00	.....
Animal quarantine stations.....	do.....	30	336	1	1899	12,000.00	23,888.08	1,111.92
Collecting agricultural statistics.....	do.....	30	333	1	1899	105,000.00	11,833.38	166.62
Botanical investigations and experiments.....	do.....	30	333	1	1899	20,000.00	100,952.48	4,047.52
							19,972.07	27.93

<sup>a</sup> Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

<sup>b</sup> Includes \$127.25 from the sale of card index.

<sup>c</sup> Includes \$104.28 from the sale of Weather Bureau publications.

# 84 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Entomological investigations.	Mar. 22, 1898	30	333	1	1899	\$20,000.00	\$19,812.64	\$187.36
Vegetable pathological investigations.	do	30	333	1	1899	20,000.00	19,634.32	365.68
Biological investigations.	do	30	334	1	1899	17,500.00	17,373.26	126.74
Pomological investigations.	do	30	334	1	1899	9,500.00	8,248.18	1,251.82
Laboratory.	do	30	334	1	1899	12,400.00	12,028.15	371.85
Forestry investigations.	do	30	334	1	1899	20,000.00	19,520.52	469.48
Experimental gardens and grounds.	do	30	334	1	1899	20,000.00	19,879.66	120.34
Soil investigations.	do	30	334	1	1899	10,000.00	9,885.85	114.15
Grass and forage plant investigations.	do	30	335	1	1899	10,000.00	9,950.99	49.01
Irrigation information.	do	30	335	1	1899	10,000.00	9,997.49	2.51
Agricultural experiment stations (\$700,000 <sup>a</sup> ).	do	30	335	1	1899	40,000.00	39,536.38	463.62
Nutrition investigations.	do	30	335	1	1899	15,000.00	14,903.08	96.92
Public road inquiries.	do	30	336	1	1899	8,000.00	7,469.50	530.50
Publications.	do	30	336	1	1899	65,000.00	64,773.62	226.38
Purchase and distribution of valuable seeds.	do	30	337	1	1899	130,000.00	128,350.61	1,649.39
Investigating production of domestic sugar.	do	30	338	1	1899	7,000.00	6,860.30	139.70
Salaries and expenses, Bureau of Animal Industry.	do	30	338	1	1899	900,000.00	892,164.47	6,828.45
Weather Bureau.	do	30	339	1	1899	1,015,502.00	1,008,971.30	6,530.70
Salaries, officers and clerks.	Mar. 1, 1899	30	947	1	1900	336,340.00	330,666.24	5,673.76
Furniture, cases, and repairs.	do	30	955	1	1900	10,000.00	9,771.27	228.73
Library.	do	30	954	1	1900	5,000.00	4,291.17	708.83
Museum.	do	30	954	1	1900	1,500.00	1,490.01	9.99
Postage.	do	30	954	1	1900	2,000.00	2,000.00	
Contingent expenses.	do	30	955	1	1900	25,000.00	23,769.38	1,230.62
Animal quarantine stations.	do	30	954	1	1900	12,000.00	11,477.87	522.13
Collecting agricultural statistics.	do	30	950	1	1900	110,000.00	107,653.62	2,346.38
Botanical investigations and experiments.	do	30	950	1	1900	20,000.00	19,689.51	310.49
Entomological investigations.	do	30	951	1	1900	20,000.00	19,920.64	79.36
Vegetable pathological investigations.	do	30	951	1	1900	26,000.00	25,854.44	145.56
Biological investigations.	do	30	951	1	1900	17,500.00	17,344.00	156.00
Pomological investigations.	do	30	951	1	1900	9,500.00	9,099.61	400.39
Laboratory.	do	30	951	1	1900	17,700.00	17,182.80	517.20
Forestry investigations.	do	30	952	1	1900	40,000.00	39,991.49	8.51
Experimental gardens and grounds.	do	30	952	1	1900	28,000.00	27,589.66	410.34
Soil investigations.	do	30	952	1	1900	20,000.00	19,717.02	282.98
Grass and forage plant investigations.	do	30	952	1	1900	12,000.00	11,566.84	433.16
Irrigation investigations.	do	30	953	1	1900	35,000.00	33,732.57	1,267.43
Agricultural experiment stations (\$765,000 <sup>a</sup> ).	do	30	953	1	1900	45,000.00	43,702.20	1,297.80
Nutrition investigations.	do	30	953	1	1900	15,000.00	14,950.86	49.14
Public road inquiries.	do	30	954	1	1900	8,000.00	7,854.35	145.65
Publications.	do	30	954	1	1900	80,000.00	79,516.76	483.24
Purchase and distribution of valuable seeds.	do	30	955	1	1900	130,000.00	128,366.12	1,633.87
Investigating production of domestic sugar.	do	30	956	1	1900	7,000.00	6,717.82	282.18
Tea-culture investigations.	do	30	956	1	1900	1,000.00	999.33	.67
Salaries and expenses, Bureau of Animal Industry.	do	30	956	1	1900	950,000.00	918,449.03	31,550.97
Weather Bureau.	do	30	957	1	1900	1,022,482.00	1,014,238.80	8,243.20
Salaries, officers and clerks.	May 20, 1900	31	191	1	1901	326,680.00	319,809.25	6,870.75
Library.	do	31	194	1	1901	5,000.00	4,118.95	881.07
Contingent expenses.	do	31	194	1	1901	37,000.00	35,623.95	1,376.05
Animal quarantine stations.	do	31	194	1	1901	50,000.00	49,343.52	656.48
Collecting agricultural statistics.	do	31	194	1	1901	110,000.00	109,729.76	270.24
Botanical investigations and experiments.	do	31	195	1	1901	30,000.00	29,590.49	409.51
Entomological investigations.	do	31	195	1	1901	22,500.00	22,265.57	234.43
Vegetable pathological investigations.	do	31	195	1	1901	28,000.00	27,488.57	511.43

<sup>a</sup> Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

<sup>b</sup> Includes \$26,992.92 received from sale of American products in Europe.



Statement of appropriations, disbursements, and unexpended balances for the United States  
Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Biological investigations.....	May 20, 1900	31	196	1	1901	\$17,500.00	\$17,195.83	\$304.17
Pomological investigations.....	do.	31	196	1	1901	9,500.00	9,315.11	184.89
Laboratory.....	do.	31	196	1	1901	28,500.00	28,395.45	104.55
Forestry investigations.....	do.	31	197	1	1901	80,000.00	79,695.87	304.13
Experimental gardens and grounds.....	do.	31	197	1	1901	20,000.00	19,986.72	13.28
Soil investigations.....	do.	31	197	1	1901	25,000.00	24,924.94	75.06
Grass and forage plant investigations.....	do.	31	198	1	1901	17,000.00	15,225.83	1,774.17
Irrigation investigations.....	do.	31	199	1	1901	50,000.00	49,973.09	26.91
Agricultural experiment stations (\$780,000 <sup>a</sup> ).....	do.	31	198	1	1901	b 60,251.01	59,883.47	367.54
Nutrition investigations.....	do.	31	199	1	1901	17,500.00	17,499.67	245.33
Arlington experimental farm.....	do.	31	199	1	1901	10,000.00	9,946.03	53.97
Public road inquiries.....	do.	31	200	1	1901	14,000.00	13,990.76	9.24
Publications.....	do.	31	200	1	1901	105,000.00	104,680.67	319.33
Purchase and distribution of valuable seeds.....	do.	31	200	1	1901	170,000.00	149,615.49	20,384.51
Investigating production of domestic sugar.....	do.	31	201	1	1901	7,000.00	c 6,690.25	309.75
Tea-culture investigations.....	do.	31	202	1	1901	5,000.00	4,959.42	40.58
Salaries and expenses, Bureau of Animal Industry.....	do.	31	202	1	1901	e 1,000,514.96	976,566.75	23,948.21
Weather Bureau:								
Salaries.....	do.	31	202	1	1901	153,320.00	152,688.11	631.89
Fuel, lights, and repairs.....	do.	31	203	1	1901	9,000.00	8,877.36	122.64
Contingent expenses.....	do.	31	203	1	1901	8,000.00	7,906.40	93.60
General expenses.....	do.	31	203	1	1901	828,000.00	823,921.78	4,078.22
Meteorological observation stations.....	do.	31	204	1	1901	60,000.00	59,019.49	980.51
Salaries.....	Mar. 2, 1901	31	922	1	1902	373,820.00	370,039.69	3,780.31
Library.....	do.	31	934	1	1902	7,000.00	6,754.06	245.94
Contingent expenses.....	do.	31	934	1	1902	37,000.00	34,543.24	2,456.76
Animal quarantine stations.....	do.	31	926	1	1902	25,000.00	24,814.88	185.12
Collecting agricultural statistics.....	do.	31	934	1	1902	120,000.00	117,060.06	2,939.94
Botanical investigations and experiments.....	do.	31	928	1	1902	45,000.00	44,950.93	49.07
Entomological investigations.....	do.	31	931	1	1902	28,513.18	27,069.77	1,443.41
Vegetable pathological investigations.....	do.	31	927	1	1902	60,000.00	59,999.45	.55
Biological investigations.....	do.	31	932	1	1902	20,000.00	19,807.80	192.20
Pomological investigations.....	do.	31	927	1	1902	20,000.00	19,985.14	14.86
Laboratory.....	do.	31	930	1	1902	24,500.00	24,417.47	82.53
Forestry investigations.....	do.	31	929	1	1902	146,280.00	145,809.76	470.24
Experimental gardens and grounds.....	do.	31	929	1	1902	20,000.00	19,725.80	274.20
Soil investigations.....	do.	31	931	1	1902	91,000.00	89,987.21	1,012.79
Grass and forage plant investigations.....	do.	31	928	1	1902	20,000.00	19,566.91	433.09
Irrigation investigations.....	do.	31	936	1	1902	50,000.00	49,980.86	19.14
Agricultural experiment stations (\$789,000 <sup>a</sup> ).....	do.	31	935	1	1902	d 69,157.05	69,052.71	104.34
Nutrition investigations.....	do.	31	936	1	1902	20,000.00	19,951.48	48.52
Arlington experimental farm.....	do.	31	936	1	1902	10,000.00	9,897.16	102.84
Plans for building Department of Agriculture, 1901-2.....	do.	31	938	1	1902	5,000.00	5,000.00	.....
Public road inquiries.....	do.	31	938	1	1902	20,000.00	19,957.01	42.99
Publications.....	do.	31	933	1	1902	188,000.00	187,657.52	342.48
Purchase and distribution of valuable seeds.....	do.	31	937	1	1902	270,000.00	266,614.22	3,385.78
Investigating production of domestic sugar.....	do.	31	936	1	1902	5,000.00	4,346.31	653.69
Tea-culture investigations.....	do.	31	937	1	1902	7,000.00	6,816.25	183.75
Bureau of Animal Industry.....	do.	31	925	1	1902	1,092,190.28	1,092,100.94	89.34
Weather Bureau:								
Salaries.....	do.	31	923	1	1902	159,820.00	159,769.71	50.29
Fuel, lights, and repairs.....	do.	31	923	1	1902	9,000.00	8,919.71	80.29
Contingent expenses.....	do.	31	923	1	1902	8,000.00	7,942.81	57.19
General expenses.....	do.	31	923	1	1902	865,500.00	864,490.74	1,009.26
Meteorological observation stations.....	do.	31	924	1	1902	60,000.00	59,646.49	353.51
Buildings.....	do.	31	924	1	1902	46,000.00	46,000.00	.....

<sup>a</sup> Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

<sup>b</sup> Including \$251.01 received from sales of card index.

<sup>c</sup> Including \$514.96 received from sales of American butter in foreign markets.

<sup>d</sup> Including \$157.05 received from sales of card index.

## 86 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Salaries.....	June 3, 1902	32	286	1	1903	\$465,500.00	\$450,976.17	\$14,523.83
Library.....	do.....	32	300	1	1903	8,000.00	7,635.11	364.89
Contingent expenses.....	do.....	32	301	1	1903	37,000.00	42,916.14	83.86
Urgent deficiency, contingent.....	do.....	32	1062	1	1903	6,000.00		
Vegetable pathological investigations.....	do.....	32	291	1	1903	105,000.00	103,646.28	1,353.72
Vegetable pathological investigations, 1902-3.....	do.....	32	1152	1	1903	5,000.00	4,130.02	869.98
Pomological investigations.....	do.....	32	291	1	1903	30,000.00	29,606.83	393.17
Botanical investigations and experiments.....	do.....	32	292	†	1903	55,000.00	54,900.42	99.58
Grass and forage plant investigations.....	do.....	32	292	1	1903	30,000.00	29,527.41	472.59
Experimental gardens and grounds.....	do.....	32	293	1	1903	25,000.00	24,935.74	64.26
Arlington experimental farm.....	do.....	32	293	1	1903	15,000.00	14,998.81	1.19
Investigating production of domestic sugar.....	do.....	32	295	1	1903	5,000.00	4,065.10	934.90
Tea-culture investigations.....	do.....	32	293	1	1903	10,000.00	7,500.10	2,499.90
Purchase and distribution of valuable seeds.....	do.....	32	293	1	1903	270,000.00	266,229.81	3,770.19
Forestry investigations.....	do.....	32	295	1	1903	254,000.00	244,781.68	9,218.32
Laboratory.....	do.....	32	296	1	1903	60,500.00	59,518.91	918.09
Soil investigations.....	do.....	32	297	1	1903	130,000.00	128,408.15	1,591.85
Entomological investigations.....	do.....	32	298	1	1903	37,500.00	37,485.44	14.56
Entomological investigations, 1902-3.....	do.....	32	298	1	1903	8,000.00	7,989.42	10.58
Biological investigations.....	do.....	32	298	1	1903	26,000.00	25,616.80	383.20
Biological investigations, 1902-3.....	do.....	32	298	1	1903	2,000.00	1,949.61	50.39
Urgent deficiency publications.....	do.....	32	1062	1	1903	200,000.00	190,961.49	13,038.51
Collecting agricultural statistics.....	do.....	32	300	1	1903	4,000.00		
Agricultural experiment stations (\$796,000) <sup>a</sup> .....	do.....	32	301	1	1903	94,200.00	94,023.27	176.73
Amount of deposits.....	do.....	32	301	1	1903	76,000.00	77,552.69	333.31
Nutrition investigations.....	do.....	32	302	1	1903	1,856.00		
Irrigation investigations.....	do.....	32	302	1	1903	20,000.00	19,901.12	98.88
Public road inquiries.....	do.....	32	302	1	1903	65,000.00	62,201.12	2,798.88
Foreign market investigations.....	do.....	32	300	1	1903	30,000.00	29,996.13	3.87
Silk investigations.....	do.....	32	303	1	1903	6,500.00	6,140.02	359.98
Expenses, Bureau of Animal Industry.....	do.....	32	289	1	1903	10,000.00	7,133.32	2,866.68
Urgent deficiency, Bureau of Animal Industry.....	do.....	32	1165	1	1903	1,660,000.00	1,444,113.05	215,886.95
Weather Bureau:						500,000.00		
Salaries.....	do.....	32	286	1	1903	165,260.00	164,927.46	332.54
Fuel, lights, and repairs.....	do.....	32	287	1	1903	10,000.00	9,964.65	35.35
Contingent expenses.....	do.....	32	287	1	1903	8,000.00	7,806.38	193.62
General expenses.....	do.....	32	287	1	1903	915,000.00	428,219.24	1,280.76
Meteorological observation stations.....	do.....	32	288	1	1903	60,000.00	480,377.71	5,622.29
Buildings.....	do.....	32	288	1	1903	50,000.00	59,628.24	371.76
Cables and land lines.....	do.....	32	288	1	1903	40,000.00	49,467.00	533.00
Storm - warning stations, Glenhaven and South Manitou Island, Mich.....	do.....	32	288	1	1903	15,000.00	15,000.00	-----
Salaries, officers and clerks.....	Mar. 3, 1903	32	1147	1	1904	470,080.00	458,295.90	11,784.10
Salaries, extra laborers.....	do.....	32	1147	1	1904	1,000.00	982.01	17.99
Bureau of Animal Industry:								
General expenses, including \$1,800 for rent of building.....	do.....	32	1150	1	1904	1,200,000.00	1,199,410.98	589.02
To eradicate contagious diseases of animals.....	do.....	32	-----	-----	-----	250,000.00	249,868.64	131.06
Bureau of Plant Industry:								
Vegetable pathological investigations.....	do.....	32	1152	1	1904	122,000.00	122,889.98	.06
Rent of building.....	do.....	32	1152	1	1904	3,000.00	2,109.96	
Vegetable pathological investigations, 1903-4.....	do.....	32	1152	1	1904	5,000.00	4,998.41	1.59
Pomological investigations.....	do.....	32	1153	1	1904	37,000.00	35,636.08	1,363.92

<sup>a</sup> Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

<sup>b</sup> Receipts from sales of certain products of Alaska, Hawaii, and Porto Rico experiment stations.

## Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Bureau of Plant Industry—Continued.								
Botanical investigations and experiments.....	Mar. 3, 1903	32	1153	1	1904	\$62,000.00	\$60,693.23	\$1,306.77
Rent of building.....	do.	32	1153	1	1904	3,000.00	3,000.00	.....
Grass and forage plant investigations.....	do.	32	1154	1	1904	33,800.00	34,514.48	235.52
Rent of building.....	do.	32	1154	1	1904	1,200.00	250.00	
Experimental gardens and grounds, Department of Agriculture.....	do.	32	1154	1	1904	25,000.00	24,984.11	15.89
Arlington Experimental Farm.....	do.	32	1155	1	1904	15,000.00	14,972.99	27.01
Tea-culture investigations.....	do.	32	1155	1	1904	10,000.00	8,701.07	1,298.93
Purchase and distribution of valuable seeds.....	do.	32	1155	1	1904	257,000.00	257,247.74	256.26
Foreign seed and plant introduction.....	do.	32	1155	1	1904	30,000.00	27,483.93	2,012.07
Rent of building.....	do.	32	1156	1	1904	3,000.00	.....	3,000.00
Investigating production of domestic sugar.....	do.	32	1156	1	1904	5,000.00	4,249.41	750.59
Bureau of Forestry:								
Forestry investigations, including \$10,000 for rent of building.....	do.	32	1156	1	1904	312,860.60	311,588.63	1,271.37
Protection of forest reserves.....	do.	32	1156	1	1904	16,864.01	341.12	16,522.89
Bureau of Chemistry:								
Laboratory, including \$5,000 for table sirup.....	do.	32	1157	1	1904	60,500.00	60,317.39	182.61
Laboratory, table sirup, 1903-4.....	do.	32	1157	1	1904	10,000.00	9,898.89	101.11
Bureau of Soils, including \$2,000 for rent of building.....	do.	32	1159	1	1904	170,000.00	166,286.32	3,713.68
Entomological investigations.....	do.	32	1160	1	1904	43,500.00	39,114.76	4,385.24
Silk investigations.....	do.	32	1160	1	1904	10,000.00	9,055.31	944.69
Entomological investigations, 1903-4.....	do.	32	1160	1	1904	12,000.00	11,825.82	174.18
Biological investigations, including \$1,000 for care of game.....	do.	32	1160	1	1904	34,000.00	33,066.92	933.08
Publications, Department of Agriculture, Farmers' Bulletins.....	do.	32	1161	1	1904	105,000.00	104,997.90	2.10
Artists, etc.....	do.	32	1161	1	1904	10,000.00	9,992.49	7.51
Labor, etc.....	do.	32	1161	1	1904	85,000.00	84,746.73	253.27
Collecting agricultural statistics.....	do.	32	1162	1	1904	104,200.00	103,225.90	974.10
Collecting agricultural statistics, 1903-4.....	do.	32	1162	1	1904	5,000.00	4,996.84	3.16
Foreign-market investigations.....	do.	32	1162	1	1904	7,500.00	7,455.40	44.60
Library, Department of Agriculture.....	do.	32	1163	1	1904	10,000.00	9,972.93	27.07
Contingent expenses, Department of Agriculture.....	do.	32	1163	1	1904	37,000.00	36,999.77	.23
Agricultural experiment stations (\$810,000 <sup>b</sup> ).....	do.	32	1163	1	1904	40,000.00	39,997.74	2.26
Stations of Alaska.....	do.	32	1164	1	1904	15,000.00	15,000.00	.....
Stations of Hawaii.....	do.	32	1164	1	1904	15,000.00	15,000.00	.....
Stations of Porto Rico.....	do.	32	1164	1	1904	15,000.00	15,000.00	.....
Farmers' institutes.....	do.	32	1164	1	1904	5,000.00	4,838.69	161.31
Nutrition investigations.....	do.	32	1164	1	1904	20,000.00	19,994.18	5.82
Irrigation investigations.....	do.	32	1165	1	1904	65,000.00	64,938.65	61.35
Public road inquiries.....	do.	32	1165	1	1904	32,000.00	31,813.00	187.00
Public road inquiries, 1903-4.....	do.	32	1165	1	1904	3,000.00	3,000.00	.....
Weather Bureau:								
Salaries.....	do.	32	1148	1	1904	175,440.00	175,098.94	341.06
Fuel, lights, and repairs.....	do.	32	1148	1	1904	6,000.00	5,981.63	18.37
Contingent expenses.....	do.	32	1148	1	1904	8,000.00	7,818.52	181.48
General expenses, salaries.....	do.	32	1149	1	1904	472,300.00	471,917.22	382.78
General expenses, miscellaneous.....	do.	32	1149	1	1904	496,780.00	494,741.03	2,038.97
Buildings.....	do.	32	1149	1	1904	50,000.00	50,000.00	.....
Cables and land lines.....	do.	32	1149	1	1904	40,000.00	40,000.00	.....

<sup>a</sup> This appropriation and amount transferred from Department of Interior.

<sup>b</sup> Of this amount, \$720,000 was paid directly to the experiment stations from the Treasury Department.

# 88 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Salaries, officers and clerks . . . . .	Apr. 23, 1904	33	276	1	1905	\$481,300.00	\$407,998.89	\$10,301.11
Salaries, extra laborers . . . . .	do	33	277	1	1905	1,000.00	971.66	28.34
Bureau of Animal Industry:								
Deficiency appropriation . . . . .	do	33	1242	1	1905	150,000.00	1,399,100.85	899.15
General expenses, including \$1,800 for rent of building . . . . .	do	33	279	1	1905	1,250,000.00		
Animal breeding and feeding . . . . .	do	33	281	1	1905	25,000.00	20,540.67	4,459.33
To eradicate contagious diseases of animals, 1904-5a . . . . .	do	33	5	1	1905	250,000.00	248,980.79	1,019.21
Bureau of Plant Industry:								
Vegetable pathological investigations . . . . .	do	33	281	1	1905	145,000.00	145,705.01	
Rent of building . . . . .	do	33	281	1	1905	3,000.00	2,294.99	
Vegetable pathological investigations, 1904-5 . . . . .	do	33	281	1	1905	2,000.00	2,000.00	
Rent of quarters (deficiency) . . . . .	do	33	603	1	1905	2,500.00	2,485.00	15.00
Pomological investigationsb . . . . .	do	33	282	1	1905	43,500.00	43,657.69	2,268.52
Botanical investigations and experiments . . . . .	do	33	283	1	1905	64,500.00	63,972.36	527.64
Rent of building . . . . .	do	33	283	1	1905	3,000.00	3,000.00	
Grass and forage plant investigations . . . . .	do	33	283	1	1905	40,500.00	40,012.04	487.96
Rent of building . . . . .	do	33	283	1	1905	2,000.00	1,500.00	500.00
Experimental gardens and grounds, Department of Agriculture . . . . .	do	33	284	1	1905	25,000.00	24,725.40	274.60
Greenhouses, Department of Agriculture, 1904-5 . . . . .	do	33	284	1	1905	25,000.00	24,995.32	4.68
Arlington Experimental Farm . . . . .	do	33	284	1	1905	20,000.00	19,818.95	181.05
Tea-culture investigations . . . . .	do	33	284	1	1905	10,000.00	8,387.15	1,612.85
Purchase and distribution of valuable seeds . . . . .	do	33	285	1	1905	242,500.00	240,134.03	2,365.97
Foreign seed and plant introduction . . . . .	do	33	286	1	1905	40,000.00	39,687.44	312.56
Repairs to building . . . . .	do	33	285	1	1905	7,500.00	4,000.00	3,500.00
Investigating production of domestic sugar . . . . .	do	33	286	1	1905	7,500.00	7,222.14	277.86
Bureau of Forestry:								
Forestry investigations, including \$15,500 for rent of building . . . . .	do	33	286	1	1905	388,000.00	386,566.66	1,433.34
Testing timbers, Louisiana Purchase Exposition, St. Louis, Mo. (deficiency act) . . . . .	do	33	1242	1	1905	10,000.00	9,985.82	14.18
Bureau of Chemistry:								
Laboratory, including \$15,000 for table sirup . . . . .	do	33	287	1	1905	105,000.00	103,693.95	1,306.05
Laboratory, 1904-5 . . . . .	do	33	288	1	1905	15,000.00	14,716.95	283.05
Laboratory road materials . . . . .	do	33	288	1	1905	15,000.00	14,802.99	197.01
Bureau of Soils:								
Soil investigations, including \$6,000 for rent of building . . . . .	do	33	288	1	1905	170,000.00	168,638.84	1,361.16
Entomological investigations . . . . .	do	33	289	1	1905	70,000.00	68,983.63	1,016.37
Cotton boll-weevil investigations, 1904-5a . . . . .	do	33	5	1	1905	250,000.00	220,782.04	29,217.96
Biological investigations . . . . .	do	33	290	1	1905	33,000.00	32,937.70	62.30
Biological investigations, 1904-5, care of elk . . . . .	do	33	291	1	1905	1,000.00	807.14	192.86
Publications, Department of Agriculture, Farmers' Bulletins . . . . .	do	33	291	1	1905	105,000.00	104,885.16	114.84
Artists, etc. . . . .	do	33	291	1	1905	15,000.00	14,635.28	364.72
Labor, etc . . . . .	do	33	291	1	1905	89,000.00	88,985.64	14.36
Labor, etc., 1904-5 . . . . .	do	33	291	1	1905	1,000.00	430.64	569.36
Collecting agricultural statistics . . . . .	do	33	292	1	1905	132,000.00	130,522.28	1,477.72
Foreign-market investigations . . . . .	do	33	292	1	1905	7,500.00	6,069.72	1,430.28

a By transfer from cotton boll weevil to Bureau of Animal Industry, 1904-5 . . . . . 3,500.00

b By receipts from sale of fruits and vegetables (Pomological investigations) . . . . . 2,426.21

c By transfer from foreign to domestic seeds . . . . . 4,183.54

*Statement of appropriations disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Library, Department of Agriculture	Apr. 23, 1904	33	293	1	1905	\$10,000.00	\$9,627.92	\$372.08
Contingent expenses, Department of Agriculture	.....do.....	33	293	1	1905	37,000.00	36,953.00	47.00
Agricultural experiment stations (\$810,000 <sup>a</sup> )	.....do.....	33	293	1	1905	40,000.00	39,703.10	296.90
Stations of Alaska	.....do.....	33	294	1	1905	15,000.00	15,000.00	.....
Stations of Hawaii	.....do.....	33	294	1	1905	15,000.00	15,000.00	.....
Stations of Porto Rico	.....do.....	33	294	1	1905	15,000.00	15,000.00	.....
Farmers' institutes	.....do.....	33	294	1	1905	5,000.00	4,603.53	396.47
Nutrition investigations	.....do.....	33	294	1	1905	20,000.00	19,976.98	23.02
Irrigation investigations	.....do.....	33	294	1	1905	67,500.00	67,416.45	83.55
Public road inquiries	.....do.....	33	295	1	1905	35,000.00	34,319.03	680.97
Building, Department of Agriculture	.....do.....	32	806	1	1905	250,000.00	108,496.32	141,503.68
Weather Bureau:								
Salaries	.....do.....	33	277	1	1905	180,440.00	180,225.57	214.43
Fuel, lights, and repairs	.....do.....	33	278	1	1905	8,000.00	7,979.20	20.80
Contingent expenses	.....do.....	33	278	1	1905	10,000.00	9,691.93	308.07
General expenses, salaries	.....do.....	33	278	1	1905	492,300.00	491,725.31	574.69
General expenses, miscellaneous	.....do.....	33	279	1	1905	572,000.00	569,792.31	2,207.69
Buildings	.....do.....	33	279	1	1905	48,000.00	47,803.11	196.89
Cables and land lines	.....do.....	33	279	1	1905	27,000.00	26,991.09	8.91
Salaries, officers and clerks	Mar. 3, 1905 <sup>b</sup>	33	861	1	1906	804,970.00	782,913.30	22,056.70
Salaries, extra labor	.....do.....	33	861	1	1906	10,000.00	8,820.34	1,179.66
Bureau of Animal Industry:								
Deficiency act	Feb. 27, 1906	.....	.....	.....	1906	63,000.00	29,863.06	33,136.94
General expenses	Mar. 3, 1905	33	864	1	1906	1,429,020.00	1,256,254.31	172,765.69
Animal breeding and feeding	.....do.....	33	866	1	1906	25,000.00	16,651.32	8,348.68
Rent of buildings	.....do.....	33	865	1	1906	2,500.00	1,653.02	846.98
Bureau of Plant Industry:								
Vegetable pathological investigations	.....do.....	33	867	1	1906	139,640.00	122,341.52	17,298.48
Rent of building	.....do.....	33	867	1	1906	6,000.00	3,070.00	2,930.00
Vegetable pathological investigations, 1905-6	.....do.....	33	868	1	1906	10,000.00	7,278.05	2,721.95
Grain investigations	.....do.....	33	868	1	1906	25,000.00	20,040.29	4,959.71
Pomological investigations	.....do.....	33	868	1	1906	33,640.00	32,464.49	1,175.51
Rent of building	.....do.....	33	868	1	1906	2,000.00	1,870.00	130.00
Botanical investigations and experiments	.....do.....	33	869	1	1906	60,840.00	54,517.26	6,322.74
Rent of building	.....do.....	33	869	1	1906	3,000.00	2,750.00	250.00
Grass and forage plant investigations	.....do.....	33	869	1	1906	37,160.00	30,768.51	6,391.49
Rent of building	.....do.....	33	869	1	1906	2,500.00	1,375.00	1,125.00
Experimental gardens and grounds	.....do.....	33	870	1	1906	15,320.00	13,837.04	1,482.96
Experimental gardens and grounds, 1905-6	.....do.....	33	870	1	1906	5,000.00	4,807.82	192.18
Arlington experimental farm	.....do.....	33	870	1	1906	20,000.00	19,040.13	959.87
Tea-culture investigations	.....do.....	33	870	1	1906	8,500.00	6,910.79	1,589.21
Purchase and distribution of valuable seeds	.....do.....	33	870	1	1906	195,140.00	186,325.12	8,814.88
Foreign seed and plant introduction	.....do.....	33	871	1	1906	37,780.00	28,406.09	9,373.91
Repairs to building	.....do.....	33	871	1	1906	10,000.00	.....	10,000.00
Investigating production of domestic sugar	.....do.....	33	872	1	1906	7,500.00	6,489.06	1,010.94
Forest Service:								
General expenses, Forest Service	.....do.....	33	872	1	1906	768,180.00	722,031.96	46,148.04
Rent of buildings	.....do.....	33	873	1	1906	25,000.00	14,056.85	10,943.15
Bureau of Chemistry, laboratory, including \$3,000 for table sirup	.....do.....	23	873	1	1906	130,920.00	117,359.87	13,560.13
Bureau of Soils, soil investigations, including \$4,000 for rent of building	.....do.....	33	875	1	1906	170,000.00	162,268.42	7,731.58
Bureau of Entomology, entomological investigations, including \$2,500 for moth investigations	.....do.....	33	876	1	1906	68,060.00	63,292.82	4,767.18

<sup>a</sup> Of this amount \$720,000 was paid directly to the experiment stations from the Treasury Department.

<sup>b</sup> For the years 1905 and 1906 the figures represent payments made to close of June 30, 1906, the accounts for those years being still open at the date of this revision.

# 90 HISTORICAL SKETCH OF DEPARTMENT OF AGRICULTURE.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

Purpose.	Date of appropriation act.	Reference to Statutes at Large.			Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
		Vol.	Page.	Sec.				
Bureau of Biological Survey:								
Biological investigations.....	Mar. 3, 1905	33	877	1	1906	\$44,420.00	\$42,534.43	\$1,885.57
Publications, Department of Agriculture, farmers' bulletins.....	do.	33	878	1	1906	98,750.00	96,461.42	2,288.58
Artists, etc.....	do.	33	878	1	1906	3,500.00	3,427.08	72.92
Labor, etc.....	do.	33	879	1	1906	30,000.00	28,036.26	1,963.74
Bureau of Statistics:								
Collecting agricultural statistics.....	do.	33	879	1	1906	93,900.00	82,104.53	11,795.47
Foreign market investigations.....	do.	33	879	1	1906	4,900.00	4,720.13	179.87
Library, Department of Agriculture.....	do.	33	880	1	1906	8,040.00	6,287.16	1,752.84
Contingent expenses, Department of Agriculture.....	do.	33	880	1	1906	35,000.00	30,597.94	4,402.06
Contingent expenses, 1905-6.....	do.	33	880	1	1906	2,000.00	2,000.00	.....
Agricultural experiment stations (\$1,034,660*).....	do.	33	881	1	1906	21,660.00	20,009.87	1,650.13
Stations of Alaska, including \$3,000 for purchase of live stock.....	do.	33	881	1	1906	18,000.00	16,800.00	1,200.00
Stations of Hawaii.....	do.	33	881	1	1906	15,000.00	15,000.00	.....
Stations of Porto Rico.....	do.	33	881	1	1906	15,000.00	15,000.00	.....
Farmers' Institute.....	do.	33	882	1	1906	5,000.00	4,024.57	975.43
Nutrition investigations.....	do.	33	882	1	1906	20,000.00	17,594.28	2,405.72
Irrigation investigations.....	do.	33	882	1	1906	74,200.00	66,156.35	8,043.65
Public road inquiries.....	do.	33	882	1	1906	37,660.00	32,487.49	5,172.51
Cotton-boll weevil investigations.....	do.	33	883	1	1906	190,000.00	143,014.07	46,985.93
Building, Department of Agriculture.....	Feb. 9, 1903	32	806	.....	.....	250,000.00 700,000.00	469,065.32	480,934.68
Weather Bureau:								
Salaries.....	Mar. 3, 1905	33	862	1	1906	191,430.00	190,930.72	499.28
Fuel, lights, and repairs.....	do.	33	862	1	1906	10,000.00	9,112.13	887.87
Contingent expenses.....	do.	33	863	1	1906	10,000.00	7,879.65	2,120.35
Salaries, station employees.....	do.	33	863	1	1906	531,550.00	487,988.40	43,561.60
General expenses.....	do.	33	863	1	1906	562,010.00	405,296.62	156,713.38
Buildings.....	do.	33	863	1	1906	53,000.00	52,716.93	283.07
Cables and land lines.....	do.	33	864	1	1906	35,000.00	33,626.06	1,373.94

\* Of this amount, \$960,000 was paid directly to the experiment stations from the Treasury Department.

*Statement of appropriations, disbursements, and unexpended balances for the United States Department of Agriculture, etc.—Continued.*

RECAPITULATION.

Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.	Fiscal year.	Amount appropriated.	Amount disbursed.	Amount unexpended.
1839.....	\$1,000.00	\$1,000.00	.....	1874.....	\$257,690.00	\$233,765.78	\$23,924.22
1840.....	.....	.....	.....	1875.....	337,380.00	321,079.83	16,300.17
1841.....	.....	.....	.....	1876.....	249,120.00	198,843.64	50,276.36
1842.....	1,000.00	1,000.00	.....	1877.....	194,686.96	188,206.19	6,480.77
1843.....	.....	.....	.....	1878.....	198,640.00	197,634.94	1,005.06
1844.....	2,000.00	2,000.00	.....	1879.....	206,400.00	206,360.00	40.00
1845.....	2,000.00	2,000.00	.....	1880.....	199,500.00	198,361.72	1,138.28
1846.....	3,000.00	3,000.00	.....	1881.....	275,460.31	267,608.84	b 7,851.47
1847.....	3,000.00	3,000.00	.....	1882.....	363,011.05	354,482.39	c 8,528.66
1848.....	4,500.00	4,500.00	.....	1883.....	456,396.11	438,941.72	d 17,454.39
1849.....	3,500.00	3,500.00	.....	1884.....	a 416,641.13	413,618.09	3,023.04
1850.....	5,500.00	5,500.00	.....	1885.....	e 555,930.25	558,934.89	e 96,995.36
1851.....	5,500.00	5,500.00	.....	1886.....	f 677,973.22	519,196.11	158,777.11
1852.....	5,000.00	5,000.00	.....	1887.....	g 657,641.81	628,287.14	29,354.67
1853.....	5,000.00	5,000.00	.....	1888.....	1,027,219.06	1,011,282.62	15,936.44
1854.....	10,000.00	10,000.00	.....	1889.....	h 1,134,480.60	1,033,590.22	i 100,890.38
1855.....	a 50,000.00	50,000.00	.....	1890.....	h 1,170,139.11	971,823.62	h 198,315.49
1856.....	30,000.00	30,000.00	.....	1891.....	i 1,372,049.21	1,266,277.36	105,771.85
1857.....	75,000.00	75,000.00	.....	1892.....	j 2,303,655.75	2,253,262.29	50,393.46
1858.....	63,500.00	63,157.25	\$342.75	1893.....	2,540,060.72	2,355,430.25	184,630.47
1859.....	60,000.00	60,000.00	.....	1894.....	2,603,855.58	1,977,469.28	i 626,386.30
1860.....	40,000.00	40,000.00	.....	1895.....	j 2,506,915.00	2,021,030.38	485,884.62
1861.....	60,000.00	60,000.00	.....	1896.....	2,584,013.22	2,094,916.42	489,096.80
1862.....	64,000.00	63,704.21	295.79	1897.....	2,448,763.53	2,348,512.98	100,250.55
1863.....	80,000.00	80,000.00	.....	1898.....	2,467,902.00	2,425,510.44	42,391.56
1864.....	199,770.00	189,270.00	10,500.00	1899.....	2,829,702.00	2,827,795.65	28,899.27
1865.....	112,304.05	112,196.55	107.50	1900.....	3,006,022.00	2,947,403.42	58,618.58
1866.....	167,787.82	167,787.82	.....	1901.....	3,304,265.97	3,239,137.39	65,128.58
1867.....	199,100.00	199,100.00	.....	1902.....	3,922,780.51	3,902,675.79	20,104.72
1868.....	279,020.00	277,094.34	1,925.66	1903.....	5,015,846.00	4,734,230.84	281,615.16
1869.....	172,593.00	172,593.00	.....	1904.....	5,025,024.01	4,969,311.64	55,712.37
1870.....	156,440.00	151,596.93	4,843.07	1905.....	6,094,540.00	5,881,939.57	215,026.64
1871.....	a 188,180.00	186,876.81	1,303.19	1906.....	7,175,690.00	6,000,327.85	1,175,362.15
1872.....	197,070.00	195,977.25	1,092.75	Total.....	\$65,438,391.49	\$60,110,836.13	m 5,415,652.31
1873.....	202,440.00	201,321.22	1,118.78				

a Including deficiency appropriation.

b Includes \$1,646.45 of the appropriation for reclamation of arid lands carried to the fiscal year 1882.

c Includes \$85.26 of the appropriation for reclamation of arid lands and \$3,530.85 of the appropriation for experiments in the manufacture of sugar, carried to the fiscal year 1883.

d Includes \$7,656.13 of the appropriation for reclamation of arid lands, carried to the fiscal year 1884.

e Includes \$93,192.27 of the appropriation for Bureau of Animal Industry and \$2,970.82 of the appropriation for quarantine stations, carried to the fiscal year 1886.

f For the fiscal year 1888 including the sum of \$8,000 appropriated for deficiencies in the appropriation for experiments in the manufacture of sugar for the fiscal years 1887 and 1888, of which \$7,927.50 was disbursed and \$72.50 remained unexpended.

g Includes \$12,923.25 of the appropriation for botanical investigations and \$58,364.76 of the appropriation for experiments in the manufacture of sugar, carried to the fiscal year 1890.

h Includes \$188,974.69 of the appropriation for Bureau of Animal Industry, carried to the fiscal year 1891.

i Includes \$7,891.94 for statutory salaries of the year 1894.

j For the years 1905 and 1906 the figures given represent payments made to close of June 30, 1906, the accounts for those years being still open at the date of this revision.

k This total is the amount actually appropriated for the various fiscal years, with the exception of \$37,604.70 appropriated July 13, 1868, to cover a number of expenditures made in previous years. It does not include an aggregate sum of \$369,344.48 reappropriated from the unexpended balances of several fiscal years. (See foregoing notes.)

l Does not include \$37,604.70 which was disbursed during several years, and covered by an appropriation of like amount, made July 13, 1868. (See note 5.)

m Does not include an aggregate sum of \$369,344.48 reappropriated from the unexpended balances of several fiscal years. (See foregoing notes.)





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